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East Valley Corridor Specific Plan



As Adopted and
Amended by the
City of Redlands



Revised July 2, 1996

City of Redlands East Valley Corridor Specific Plan



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Pat Gilbreath, Mayor Pro Tem

Bill Cunningham

Geni A.S. Banda

Gilberto Gil

City Council at Time of Specific Plan Adoption

Carole Beswick, Mayor

Barbara Wormser, Mayor Pro Tem

Bill Cunningham

Charles DeMirjyn

Swen Larson

PLANNING COMMISSION

Diane Christensen, Chairperson

Paul Thompson, Vice Chairman

Gerald Hansen

Jonathan Harrison

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George Webber

Planning Commission at Time of Specific Plan Adoption

Ray Alexander, Chairman

Joan Dotson, Vice Chairman

Michael Gallagher

Judy Jorgensen

Janice Nicks

Douglass Pew

Charles Wick

CITY STAFF

Jeffrey Shaw, AICP, Director of
Community Development

Eric Norris, AICP, Principal
Planner

Gary Phelps, Municipal Utilities
Director

Ron Mutter, Public Works Director

Karen Kellingsworth,
1996 Document Updating

Dan Yuhasz (Student Intern)
1996 Document Updating

City Staff at Time of Specific Plan Adoption

Jeffrey Shaw, Community
Development Director

Richard Bobertz, Senior Planner

Richard Corneille, Utilities Director

Ron Mutter, City Engineer

Former City Staff Prior to Specific Plan Adoption

William Schindler, Community Development Director

DOCUMENT UPDATES

This document reflects all amendments to this Specific Plan to **July 2, 1996**

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CITY OF REDLANDS

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FOREWORD**CHAPTER 1. PLAN DESCRIPTION AND BACKGROUND****(a) Intent of the Plan**

The East Valley Corridor is the principal gateway to the communities of the East San Bernardino Valley, including San Bernardino, Redlands, Loma Linda, Colton, Grand Terrace and Highland. The area is largely undeveloped, with over half of the planning area in agricultural production; In recent years, there has been increasing interest by property owners in developing the area. Based on its freeway and rail access, freedom from topographic and environmental constraints, large parcel sizes, and the economic growth within the San Bernardino-Riverside metropolitan area, property owners have considered it to be ideal for high quality commercial and industrial development. Such development has been constrained, however, by the lack of a backbone infrastructure of sufficient capacity to accommodate projected traffic, water, sewer, utility and service needs. The cost of planning for the engineering, financing and marketing needs of this type of development, as well as for land use and environmental concerns, was beyond the capability of individual owners or individual jurisdictions. As a result, several property owners initiated a cooperative study to be undertaken by San Bernardino County, the City of Redlands, the City of Loma Linda, and the property owners, to provide for such planning.

The purpose of this effort was to plan for the large areas of undeveloped land located along Interstate 10 in the Redlands-Loma Linda area so as to facilitate future industrial, commercial and residential development in an orderly and aesthetic manner. The objectives of the Plan are to provide a well-planned community which will attract major businesses to the area in order to provide a job base for the East Valley and strengthen the local economy, while ensuring high-quality development through design guidelines and standards.

(b) The Specific Plan Defined

The East Valley Corridor Specific Plan has been prepared pursuant to the provisions of Sections 65450 through 65453 of the California Government Code. The Plan has been adopted by local governments to provide a guide for the growth and development of the East Valley Corridor. Portions of the Plan are ordinances of the County of San Bernardino, the City of Redlands, and the City of Loma Linda. It is intended that the Specific Plan, through its maps and text, shall incorporate nearly all the

regulations and development standards affecting the use of land within the Plan area, and reflect the interests and concerns of the community through these standards and regulations. Among the subjects addressed by the Specific Plan are the locations of various land uses; development standards for buildings and facilities; regulation of land use in areas affected by safety hazards; location and capacity of circulation/transportation systems and facilities; standards for building and population density; location and capacity of water supply, sewerage and stormwater drainage facilities; and design guidelines and requirements for the planning area as a whole as well as for specific development sites.

(c) Planning Area Location

The East Valley Corridor Specific Plan includes approximately 4300 acres located in the southeastern portion of the San Bernardino Valley, adjacent to Interstate 10 and Route 30 and generally between the cities of Redlands, Loma Linda and San Bernardino. The plan area includes portions of both Redlands and Loma Linda, as well as unincorporated area under the jurisdiction of San Bernardino County. The entire planning area is within the spheres of influence of Redlands and Loma Linda.

The Plan includes an irregular shaped area bounded in general by the Santa Ana River Wash on the north; by Texas Street on the east, north of Interstate 10 (I-10); by Kansas Street on the east, south of I-10; by Barton Road on the south between Kansas and California Streets; by California Street on the west, south of Park Avenue; and by Mountain View Avenue on the west, north of I-10. The site also extends along a quarter mile strip on either side of Redlands Boulevard from California Street to San Timoteo Wash.

(d) Environmental Impact Report

The adoption of a Specific Plan constitutes a project under the California Environmental Quality Act. The East Valley Corridor Specific Plan is therefore accompanied by an Environmental Impact Report which has been prepared in accordance with CEQA guidelines and the adopted environmental review procedures of San Bernardino County, Redlands and Loma Linda.

(e) Development of the Specific Plan

The concept of a cooperative planning and development study for the I-10 corridor area was originally considered by the cities of Loma Linda,

Redlands and San Bernardino in 1980. At that time, the Board of Supervisors budgeted \$110,000 for the initial phase of the study, and a work program and Request for Proposal were prepared. However, subsequent budgetary cutbacks curtailed the study and a consultant was not selected.

A drawback of this early effort was the limitation of participation in the discussions to public entities. In October 1982, another meeting was held on the I-10 corridor concept which included about a dozen individuals owning or controlling substantial properties within the area. At that meeting, general interest and support was expressed for the concept of a joint, public-private, inter-jurisdictional effort involving planning, engineering, financing, and marketing for the area.

The concept was given a new impetus by the participation and support of key property owners whose interests would be affected by any outcome. However, since budgetary constraints had become even more stringent, it was clear at that meeting that any renewed effort would require financial support by the private sector. Those present expressed general willingness to provide reasonable project financing, and requested that the County take the lead in coordinating the project with the two Cities involved.

Further meetings were held throughout 1982 and 1983 to define the plan boundaries, the form of the final product of the study, and possible funding mechanisms. In December 1983, a mail survey of all property owners in the Corridor area was undertaken by the County to assess their interest in participating in the study. Based upon the degree of support shown by property owners, various alternatives to implement a property owner financed study were investigated. These included voluntary contributions, a one-time service charge collected through a combination of improvement zone and assessment districts, and formation of a County Service Area (CSA). The establishment of a CSA was considered the most feasible alternative for several reasons:

- 1) With a city's request, a County Service Area can overlay city and county area to create a single entity;
- 2) the CSA can borrow against future anticipated revenues to finance a study program;
- 3) the CSA has the power to assess a one-time service charge to finance the plan preparation;

- 4) a CSA joint steering committee would assure development of a coordinated plan; and
- 5) assignment of both planning and engineering powers to the CSA would assure coordinated planning and development of the project.

Hearings to consider formation of a County Service Area were held before the Local Agency Formation Committee, the County Board of Supervisors, and the City Councils of Loma Linda and Redlands in early 1984. On May 7, 1984, the Board of Supervisors adopted the resolution approving formation of CSA-110. In addition to the action taken to establish the CSA, the County and the two Cities entered into an agreement clarifying the role of each party. Of primary concern to the cities was their approval of facilities to be constructed within their spheres of influence or city limits. The agreement stipulated that CSA-110 would neither construct, operate nor maintain any capital improvement within the spheres of influence or boundaries of the cities, except pursuant to prior written approval by the City Councils. CSA-110 could, however, levy a one-time service charge to finance the East Valley Corridor Study. The CSA also provides a mechanism for assessing property owners and developers in the area for infrastructure improvements. CSA-110 is the first such Special District in the State to overlay multiple jurisdictions.

In order to finance formation of CSA-110 and preparation of the Specific Plan, The Board of Supervisors established a one-time service charge to the property owners within the planning area. This charge was levied through tax bills on all parcels within CSA-110 except for residentially-zoned parcels under one acre, and tax-exempt parcels. The service charge would fund planning and preliminary facilities design necessary for services to be furnished within CSA-110. At the same time, the Board of Supervisors approved funding a portion of the Study with Community Development Block Grant funds. The twelve-member CSA-110 District Advisory Commission was also appointed at this hearing, with four members from each of the three jurisdictions, including three public agency members and one private property owner. A fifteen member Property Owners Advisory Subcommittee was also established to provide input to CSA-110 staff during the plan preparation. For technical assistance, a Technical Advisory Committee was appointed of representatives from affected agencies, including the water districts, Caltrans, Norton Air Force Base and engineering staff from the County and cities.

The County, through CSA-110, took the role of lead agency in preparation of the Plan. County planning staff functioned as the project managers, while the County Office of Special Districts administered contracts with the consultants chosen to undertake the various components of the project.

In January 1985, a Request for Proposal was issued seeking proposals for preparation of a Land Use Plan update, an Environmental Impact Report, a Preliminary Facilities Master Plan and Engineering Study, a Financing Program Study, and an Economic Development Study for the project area. Twenty-four potential consultants were interviewed, with contracts awarded to five of these in April 1985. The companies selected included URS to do the Environmental Impact Report; William C. Lawrence Company to do the Economic Development (Marketing) portion; Metcalf & Eddy for the Engineering Study; and Sutro and Company, Incorporated to prepare the Financing Program. The Land Use Plan Update portion of the study was eventually undertaken by planning staff from the County, Loma Linda and Redlands.

In April of 1986, the scope of the project was changed somewhat when it was determined that the Plan should be adopted by all three jurisdictions as a Specific Plan. This implementation procedure, in which the Plan is adopted as ordinance by the three entities, differed from the original concept of the Plan as a policy guideline for development. With this decision, development of the Specific Plan design and performance standards became a key component of the Land Use portion of the Plan.

Citizen participation was considered to be critical throughout development of the Specific Plan. Participation by property owners was obtained through direct consultations, meetings of the Property Owners Advisory Subcommittee, public input at advertised CSA-110 District Advisory Commission meetings, and in public hearings held throughout the adoption process. Additional public hearings were held before the Local Agency Formation Commission, the Airport Land Use Commission, the County Environmental Review Committee, Planning Commission and Board of Supervisors; Redlands Planning Commission and City Council; and Loma Linda Planning Commission and City Council. These meetings, which were advertised in local newspapers as well as through written notification to property owners, afforded repeated opportunities for residents and property owners to provide input into development of the Specific Plan.

(f) Specific Plan Summary

The Specific Plan implements the General Plans of San Bernardino County and the Cities of Redlands and Loma Linda for the planning area. However, in using the Specific Plan on a daily basis, it is not usually necessary to refer to both the General Plans and the Specific Plan to determine what policies and regulations guide development for specific parcels of land. The Specific Plan, in most instances, will provide the user with all the information needed to determine the policies, regulations and standards which guide development for the parcel(s) in question.

The East Valley Corridor Specific Plan is divided into a Foreword, six Divisions and Appendices.

- (1) The Foreword is separate from the six divisions and contains those elements which contribute to an understanding of the community, the evolution of the planning process and special features of the Plan. It outlines the area's history, environmental features, existing conditions and trends, and how the Plan was initiated and developed.
- (2) Divisions 1-6 serve as the textual equivalent of the Specific Plan Map and justify the appropriateness of special development standards which have been adopted for the planning area. The intent of the standards is to secure, promote and protect the health, safety and general welfare of the community.
 - (A) Division 1, General Provisions, discusses legal aspects of the Specific Plan, including requirements for Plan amendments and how to process an application for development within the Specific Plan area.
 - (B) Division 2, Plan Foundation, contains the goals, policies and actions that form the basis for the regulations and development standards described in subsequent Divisions.
 - (C) Division 3, Land Use Districts, contains descriptions of the - Land Use Districts, including most of the detailed land use regulations applicable to the East Valley Corridor.
 - (D) Division 4, Community Design, contains a description of the design features and most of the development standards which will regulate and guide future development in the East Valley Corridor.

- (E) Division 5, Overlay Districts, contains development requirements for the Health and Safety and Preservation Overlay Districts, which identify known hazards and serve to preserve desirable natural resources.
 - (F) Division 6, Public Facilities, contains a public facilities plan designed to accommodate the long-range need for community facilities and services. A phasing plan for development of these facilities is also included.
- (3) The appendices include a series of maps and the following documents under separate cover: The Environmental Impact Report; the Engineering Report; the Market Feasibility Study and Absorption Potential Report; and the Financing Plan.

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CHAPTER 2. PLANNING AREA DESCRIPTION AND BACKGROUND**(a) Environmental Considerations**

The study area is a relatively flat plain ranging in elevation from 1040 feet mean sea level in the west to 1310 feet mean sea level in the east. The west to east slope averages about one percent.

The site lies in the San Bernardino Valley block, located between the San Jacinto and San Andreas faults. The San Bernardino Valley block has subsided relative to the San Bernardino Mountains to the north and the Perris block to the south.

Soils within most of the site are relatively young sediments consisting of sands and gravels deposited in alluvial fans emanating from the San Bernardino Mountains.

Geologic hazards on the site include seismic shaking, liquefaction and flooding. Surface fault ruptures could occur along the two known faults which transect the western portion of the Plan area. Both the San Jacinto fault and the San Andreas fault lie within a couple of miles of the area; thus, sympathetic fault movement could occur along any zone of geologic weakness in the area. However, geologic hazards do not represent severe constraints to development.

The climate in the Planning area is Mediterranean, with cool wet winters and hot, dry summers. Average seasonal temperatures range from 53 F in the winter to 80 F in the summer, although summer temperatures commonly exceed 100 F. Mean annual precipitation is about 13 inches. Most precipitation occurs from December through March and results from winter storms. Summer thunderstorms are infrequent.

Potential flood hazards in the area are associated with the Mission Zanja and Morey Arroyo in the southern portion of the planning area, and San Timoteo Creek in the southwestern and panhandle areas. Channel improvements to the Zanja and Morey Arroyo will be required to implement development plans for the area. Drainage north of Interstate 10 is toward the Santa Ana River, and will require storm drain improvements prior to development.

The project is located in the South Coast Air Basin, managed by the South Coast Air Quality Management District (SCAQMD). The area experiences high ozone levels along with poor visibility on up to 50 percent of the days between May and September. Air quality is generally considered good from

October through April. The principal source of air pollution within the project area is vehicle traffic.

The planning area contains cultural resources related to the historic period, including Indian settlement, the Spanish period, citrus development, and early settlement within Bryn Mawr and Redlands. An inventory of historical resources was done for the Environmental Impact Report, and preservation of significant sites is addressed within the Plan.

Noise impacts within the planning area were identified for parcels underlying one of the flight paths from Norton Air Force Base, and for property adjacent to the freeways. These impacts were addressed in development of the land use plan and Overlay districts.

There are no identified endangered or protected species within the plan area. However, the existing fan palm rows (*Washingtonia robusta*), planted as windbreaks around the orange groves, have been identified by the community as a unique biotic resource. The Plan contains standards to protect these trees, as well as other existing trees where possible.

(b) Development of the Planning Area

(1) Historical Development

Early development within the project area took place in the southern portion, adjacent to the Mission Zanja and the community of Bryn Mawr. The following account of early settlement of the area is excerpted from a local history column in The San Bernardino Sun:

"(The) first residents (of Bryn Mawr) were Indians, who established a village called Guachama. As there was no natural water on the site they built a Zanja, or irrigation canal, following a route laid out by Pedro Alvarez, a Mexican who lived in the district.

The Zanja was dug all the way from Guachama to Mill Creek Canyon, twelve miles to the east, and when it was completed in 1820 it irrigated the first crops ever planted in the San Bernardino Valley. The Zanja was the first engineering project to be completed in the county, and it is said to be the only one built and maintained by Indians for their own use.

A short time later an adobe residence and a storage shed were built to house the mayordomo, another Mexican named Carlo Garcia, and priests from the San Gabriel Mission, who often visited and counseled the Indians.

Sometime after 1830, the priests ordered an asistencia built. The structure was to be used as sort of an outpost mission and was constructed on what is now known as Barton Hill, one and one-half miles east of the original adobe storehouse. Due to various problems, it was not completed.

However, when the two Lugo brothers received their San Bernardino Rancho land grant in 1842, Juan del Carmen Lugo finished the asistencia and moved in.

After the Mormons purchased the Lugo ranch in 1851, Bishop Nathan Tenney occupied the adobe and was placed in charge of agricultural operations for the church, utilizing the Zanja — still the only means of irrigation in the valley.

The next residents were four brothers by the name of Cram. They occupied the adobe for two years, manufacturing furniture on a lathe driven by water power generated from the Zanja.

When the Mormons were recalled in 1857, Dr. Ben Barton purchased the asistencia and 1,000 acres of land from elders Amasa M. Lyman and Charles C. Rich. In 1866, after moving into his new brick mansion on Nevada Street (still standing there today), he used the asistencia as a stable for his farm animals and it soon fell into disrepair.

In 1924, Dr. Barton's granddaughter, Mrs. Sherman G. Batchelor, sold the asistencia's remains to the county. Under the direction of Horace B. Hinkley and the San Bernardino County Historical Society, the buildings were eventually restored and opened to the public in 1937.

The Zanja lured a number of the other families to the area, which soon became known as Old San Bernardino. Most of them settled along 'Cottonwood Row, ' (now Mission Road) named for the number of cottonwood trees growing along the banks of the Zanja.

The names of the residents living there read like a 'Who's Who' of the founding fathers of San Bernardino. They included Anson and Louis Van Leuven; James A. Cole; Henry M. Willis; Captain Nathaniel Pishon and Horace M. Frink, all of whom settled there before 1861.

The Van Leuven brothers, who arrived in 1852, were the first to cultivate orange trees in the county, making plantings over a five year span. Their trees represented the beginning of the citrus industry in the San Bernardino valley." (September 28, 1986)

Agriculture continued to dominate the planning area through the nineteenth century, during which a variety of crops, including peaches and grapes, were attempted. Navel oranges had been a successful undertaking in Riverside during the 1870's, and backers of early Redlands were actively promoting their cultivation in that area. The completion of Big Bear Dam in 1884 provided additional water for irrigation in the Valley, and by the late 1880's the citrus industry was well established in the planning area. Numerous groves were planted, separated by rows of Mexican Fan Palms, and several packing houses were in operation. Agriculture has continued to be the predominant land use within the planning area to the present, with citrus as the major crop.

(2) Existing Development

The following table summarizes the existing land uses within the planning area as of October, 1987:

<u>Land Use Type</u>	<u># Acres</u>
Agriculture	2,558
Residential	388
Commercial (office & retail)	351
Industrial	74
Vacant	390
Roads/Infrastructure	<u>589</u>
Total Acreage	4,350

These figures indicate that over half (59%) of the project area is currently under agricultural production. Most of the agriculture in this area is citrus production; other agricultural uses include alfalfa and other field crops, poultry, and horse raising. Almost the entire area north of Interstate 10 is in agricultural use, except for about 200 acres south of Lugonia between California Street and Karon Street, on which recent commercial and office development has occurred fronting I-10.

Agriculture is also found throughout the southern portion of the planning area, although it is interspersed with other uses. The southern portion, which has better access to a system of collector streets and major arterials, is generally more developed than the north. Along with scattered single family residences associated with the agricultural use in this area, there are several newer residential developments located along Redlands Boulevard, including single family tracts, multiple family projects, and mobilehome parks.

Commercial uses are heavily developed along Redlands Boulevard as well, particularly around the Alabama and Tennessee interchanges in Redlands and in the panhandle of the project area west of Mountain View, in Loma Linda. Light industrial uses, including mini-storage and light manufacturing, are intermixed with commercial in these areas, with some industrial extending south along Alabama Street.

A housing survey of the area, conducted in August 1985, indicated that there were a total of 599 dwelling units within the plan area. Forty-four percent (265 units) were single family dwellings, and fifty-six percent (334 units) were multiple units, including condominiums. Almost ninety-five percent of the housing units are located south of Interstate 10, with only 32 single family homes located in the northern portion of the planning area.

The housing survey also indicated that nearly all (94%) of the units were in sound or good condition, with over 65% constructed within the last ten years. Eighty percent of the recently constructed units were multiple family dwellings.

Public uses occupy only about one percent of the total project area, and include schools, a post office (under construction), Redlands' City Yard, the County Museum, and the Asistencia Mission. Public facilities adjacent to the planning area which will affect the Specific Plan include the City of Redlands' sewage treatment plant and landfill, abutting the project area to the north between Nevada and Alabama Streets; the Edison plant northwest of the planning area; and Norton Air Force Base, located north of the planning area across the Santa Ana River Wash.

(3) Conditions and Trends

A demographic analysis of the planning area was conducted in conjunction with the Economic Development portion of the Plan. This study compared the regional setting of the Plan area, defined as the Riverside-San Bernardino Metropolitan Statistical Area, with other MSA's in Southern California, to identify economic and demographic growth trends. The analysis concluded that the Riverside-San Bernardino MSA has historically represented a relatively small share of regional employment growth. Conversely, the area has experienced rapid growth in population, housing and labor force. The study further identified emerging trends indicating that the Riverside-San Bernardino region will play an increasingly important role in regional economic growth. The study area shows favorable housing, population and labor force characteristics, supportive of new job locations.

With regard to economic growth trends, the Riverside-San Bernardino MSA experienced relatively high job growth in service industries and retail trade. Other growing industries included government, construction, transportation, communication and utilities. Manufacturing and wholesale trade showed low levels of growth in the region.

The 1987 population forecasts issued by the Southern California Association of Governments (SCAG) assume accelerated housing growth and slower employment growth for the area. SCAG projected growth rates for communities in the area surrounding the project site to year 2010 are as follows:

Fontana	212%
Loma Linda	70%
San Bernardino	74%
Redlands	46%

The growth rate in and adjacent to Redlands has been slower than the county-wide growth rate, and is projected to stay lower than surrounding communities. This is due in part to the restrictions imposed by a growth-limiting ordinance passed by the City of Redlands in November 1978, known as Prop R. This ordinance limits to 450 the number of dwelling units that the City can approve in a single year; it also limits to 150 the total number of homes outside the City that may be connected to City water and sewer lines. (Exempted from these restrictions are housing developments of 4 homes or less, apartments of 4 units or less, and custom-built single family homes). Prop R was adopted out of a community-wide concern over accelerated growth rates in the regional area. It is the only growth-limiting ordinance in San Bernardino County.

The higher growth predicted for population and labor force in the Riverside-San Bernardino region is one of the area's strengths in terms of the development proposed for the East Valley Corridor. Other factors contributing to development potential include relatively low land and lease values, which currently vary from around \$3 to \$10.50 per square foot for commercial and industrial land. The area also has excellent highway, air and rail access.

Proximity to redevelopment areas in adjacent communities, as well as to a major medical center, will also benefit future growth in the planning area. In addition, Redlands and Loma Linda have developed many amenities which are expected to increase their attractiveness to business and industry.

The major constraints to development of the Planning area are the costly infrastructure improvements needed to provide a backbone system of roads, water supply, sewage collection and treatment, and stormwater drainage. In most instances, existing systems are adequate to serve the existing developed portions of the planning area. However, intense planned development in the undeveloped areas will require significant additional facilities. It is the intent of this Plan to provide a means for installing these facilities, through a coordinated planning effort which includes engineering, financial planning and land use planning for the study-area.

(4) Summary

This chapter of the Specific Plan has provided background on the East Valley Corridor study area and on development of the Specific Plan. This information has been included to contribute to an understanding of those factors which have shaped the present development of the study area, and which will influence future growth.

DIVISION 1. GENERAL PROVISIONS**CHAPTER 1. INTRODUCTORY PROVISIONS****Section EV1.0101 Citation**

This ordinance shall be known as the "East Valley Corridor Specific Plan" of the San Bernardino County Development Code, the City of Redlands Zoning Ordinance, and the City of Loma Linda Zoning Ordinance. It shall be sufficient to refer to said ordinance as the "East Valley Corridor Specific Plan" in any prosecution for the violation of any provision thereof, and it shall also be sufficient to designate any ordinance adding to, amending or repealing said ordinance as an addition or amendment to or repeal of said "East Valley Corridor Specific Plan".

Section EV1.0105 Intent

The East Valley Corridor Specific Plan text contains detailed land use regulations to guide growth and development within the communities and area included in the East Valley Corridor planning area. The Plan is based on findings and determinations made by the County Board of Supervisors, the Redlands City Council, and the Loma Linda City Council concerning the future size, shape and character of the communities. The Plan also contains maps which:

- (a) Delineate land use designations, the circulation network, and known hazards to public health and safety on portions of the General Plan maps of the three jurisdictions; and
- (b) Establish a Land Use District designation for each parcel, and Overlay District designations where required, on the Specific Plan maps.

Section EV1.0110 Authority for Specific Plan

The East Valley Corridor Specific Plan is adopted as ordinance by the County of San Bernardino, the City of Loma Linda, and the City of Redlands pursuant to the provisions of California Government Code Sections 65450 et. seq. The law authorizes cities and counties to prepare and adopt specific plans for portions of their areas of jurisdiction as a means to systematically implement the General Plan.

Section EV1.0115 Consistency with General Plans

Each jurisdiction adopting this Specific Plan shall ensure that the Plan is consistent with its General Plan. Inconsistency with one jurisdiction's General Plan shall not affect the validity of the Specific Plan in the other jurisdictions.

Section EV1.0120 Minimum Requirements

The provisions of the East Valley Corridor Specific Plan constitute minimum requirements. The County of San Bernardino, City of Redlands and City of Loma Linda may establish more stringent requirements within their jurisdictions where it is deemed necessary.

Section EV1.0125 Effect of Specific Plan on Past Actions and Obligations

Neither the adoption of the East Valley Corridor Specific Plan nor the repeal hereby of any ordinance shall in any manner affect the prosecution of a violation of any ordinance, when such violation was committed prior to the effective date thereof; nor shall either be construed as a waiver of any permit, license fee, charge or penalty which was required or due and unpaid under such ordinance at said effective dates. This shall not be construed as affecting any of the provisions of such ordinance relating to the collection of any such fee, charge or penalty or the penal provisions applicable to any violation thereof, required to be posted, filed, or deposited pursuant to any ordinance, and all rights and obligations appertaining thereunder, shall continue in full force and effect.

Section EV1.0130 Pending Action or Accrued Rights not Affected

- (a) No action or procedure approved prior to the effective date of the East Valley Corridor Specific Plan, and no right accrued thereby, shall be affected by the provisions of this Plan. However, all applications approved after the effective date of the Specific Plan therein shall conform to the provisions of this Plan.
- (b) Similarly, all Planned Developments and Specific Plans approved before the East Valley Corridor Specific Plan takes effect shall be and remain in full force and effect, and the property covered thereby can in all respects be developed as provided in such previously approved planned development or specific plan. Although all procedures thereafter with respect to such property shall conform to this Specific Plan, the standards for development of such property shall in all respects be those set forth in the approved Planned Development or Specific Plan that were applicable without regard to this Plan, which shall not apply to such property. If a previously approved Planned Development or Specific Plan is revoked, future development of the property covered thereby shall in all respects be governed by the Specific Plan. Should any conditionally approved Planned Development or Specific Plan be proposed for amendment, the adopted development standards and conditions of approval shall be applicable without regard to this Plan if the amendment constitutes only minor revisions to conditions of approval, design or land use within the

project and does not significantly increase environmental impact. If the proposed amendment to the approved Planned Development or Specific Plan would result in other than minor revisions to conditions of approval, design or land use, or would result in a significant increase in environmental impacts, those proposed amendments would be subject to the applicable development standards, requirements and regulations of the Specific Plan.

Section EV1.0135 Effect of Headings

The Division, Chapter, Section and Subsection headings contained in this Plan shall not be deemed to govern, limit, modify or in any manner affect the scope, meaning or intent of the provisions of any Division, Chapter, Section or Subsection of this Plan.

Section EV1.0140 Section Numbers

In reading section numbers from left to right, the first two letters shall designate the Specific Plan; the next digit or digits to the right of the letters shall designate the Division within the Specific Plan. The first two digits to the right of the decimal point shall designate the Chapter. The remaining digits indicate the Section number. For example, Section EV1.0140 designates Section 40, Chapter 1, Division 1 of the East Valley Corridor Specific Plan.

Section EV1.0145 District Area Requirements

- (a) Where it is desirable to limit the density within a land use district that provides for multiple family residential use types, a figure following the district designation shall mean the total net lot area per dwelling unit. For example, Multiple Family Residential-1500 means a minimum of 1500 square feet of net lot area shall be provided per unit in the Multiple Family Residential District.
- (b) The number of units allowed on a parcel located in a multiple family land use district which specifies the total net lot area per dwelling unit shall be calculated by dividing the total net area of the lot in square feet by the figure after the district designation. Fractional units of 50% (.50) or greater shall be rounded up to the next highest number.

Section EV1.0150 Validity

If any section, subsection, sentence, clause, phrase, or portion of the East Valley Corridor Specific Plan is for any reason held to be invalid or unconstitutional by the decision of any court of competent jurisdiction, this decision shall not effect the validity of the remaining portions of this Plan.

Section EV1.0155 Words and Phrases - How Construed

Words and phrases are to be construed according to the context and the approved usage of the language, but technical words and phrases, and such others as may have acquired a peculiar and appropriate meaning in law, County or City Codes, or are specifically defined by sections of this Plan, are to be construed according to such peculiar and appropriate meanings or definitions.

Section EV1.0160 Interpretation

Unless otherwise provided, any ambiguity concerning the content or application of the East Valley Corridor Specific Plan shall be resolved by the Planning Commission of jurisdiction.

Section EV1.0170 Area of East Valley Corridor Specific Plan

The East Valley Corridor Specific Plan area is described as all property within the perimeter boundary delineated on the Specific Plan Land Use and Overlay District Maps, attached hereto and incorporated herein by reference, as though fully set forth herein. The area includes the following San Bernardino Base and Meridian Township portions:

Township I South Range 4 West	Portions of Sections 23, 24, 25 and 26
Township 1 South Range 3 West	Sections 19, 20, 29 and portions of Sections 16, 17, 18, 21, 28 and 30

CHAPTER 2. RELATIONSHIP TO LAND USE REGULATIONS**Section EV1.0201 Land Use Ordinances Defined**

The foundations for all land use regulations adopted for the Specific Plan area include Title 8 of the San Bernardino County Code, Development Code; Title 18 of the Redlands Municipal Code, Land Use Zoning Ordinance; and Title 17 of the Loma Linda Municipal Code, Land Use Development Code.

Section EV1.0205 Specific Plan as Amendment to General Plans

- (a) The East Valley Corridor Specific Plan maps cover portions of the unincorporated area of San Bernardino County, the City of Redlands, and the City of Loma Linda.
- (b) The General Plan of each jurisdiction shall be updated along with the adoption of this Specific Plan by separate action of each jurisdiction to amend its General Plan to reflect the map and related policies identified in this Plan.

Section EV1.0210 Effect on Previous Zone Districts

Upon the effective date of the East Valley Corridor Specific Plan, the land use regulations, including official land use maps contained in the zoning ordinances of San Bernardino County, the City of Redlands, and the City of Loma Linda, are hereby deleted in the area covered by the East Valley Corridor Specific Plan.

Section EV1.0215 Regulatory Effects

- (a) The Land Use Ordinances of the County of San Bernardino, the City of Redlands, and the City of Loma Linda contain land use regulations and procedures necessary to implement this Plan. Those areas included in the Plan within each of these jurisdictions are subject to regulatory provisions of the corresponding Ordinance.
- (b) Any violation of any provision of this Specific Plan shall be punishable pursuant to the provisions of the Land Use Ordinance adopted by the agency of jurisdiction.
- (c) Variances from this Specific Plan may be obtained by methods authorized in and by the Land Use Ordinance adopted by the agency of jurisdiction.

- (d) The continuation or alteration of non-conforming uses shall be regulated by the applicable provisions of the Land Use Ordinance adopted by the agency of jurisdiction.

CHAPTER 3. APPLICATION PROCESSING PROCEDURES**Section EV1.0301 Intent**

It is the intent of the East Valley Corridor Specific Plan to streamline the development review process where possible by utilizing existing application processing procedures adopted in the Land Use Ordinance of each jurisdiction.

Section EV1.0305 Procedure

- (a) The County of San Bernardino, the City of Redlands, and the City of Loma Linda shall each have the authority to review development applications within their area of jurisdiction, to ensure compliance with the California Environmental Quality Act, the applicable Land Use Ordinance, and the standards and provisions of this Specific Plan.
- (b) For the purposes of this Section, development applications shall include any land subdivision, conditional use permit or site approval, deviation or variance, lot line adjustment, alteration to a nonconforming use, residential project, mobilehome park, or other discretionary land use application type which does not involve changes to the Specific Plan maps or text.
- (c) Land use decisions made in each jurisdiction shall be appealed under that jurisdiction's appeal procedures. Exhaustion of those procedures constitutes a final decision from which no appeal shall be available to the other jurisdictions or to any body created to implement or give advice regarding this Specific Plan.
- (d) Any development project approved for any property within the East Valley Corridor Specific Plan shall conform to all applicable development and design standards contained within this Specific Plan, except as provided in Section EV1.0130. Applicable development standards contained within this Plan shall supersede any conflicting standards set forth within any other Land Use Ordinance adopted for this area.
- (e) Environmental review for all development applications in the Specific Plan area shall be conducted with reference to the program Environmental Impact Report (EIR) prepared for the Specific Plan (SCH# 87091408), and shall require project-specific mitigation measures recommended by the EIR as necessary.

Section EV1.0310 Review of fiscal impacts on infrastructure and public services.

- (a) All development projects will submit, as part of the application package a descriptive summary of the project's locational relationship to existing infrastructure and services, and preliminary information regarding its potential impact on them.

Infrastructure and public services considered may include, but are not limited to:

- (1) Water supply and distribution.
- (2) Sewers.
- (3) Storm drain facilities.
- (4) Fire protection.
- (5) Police protection.
- (6) Schools.
- (7) Parks.
- (8) Libraries.
- (9) Other general public services.

The specific types of infrastructure and services to be reviewed shall be determined by each individual city or county.

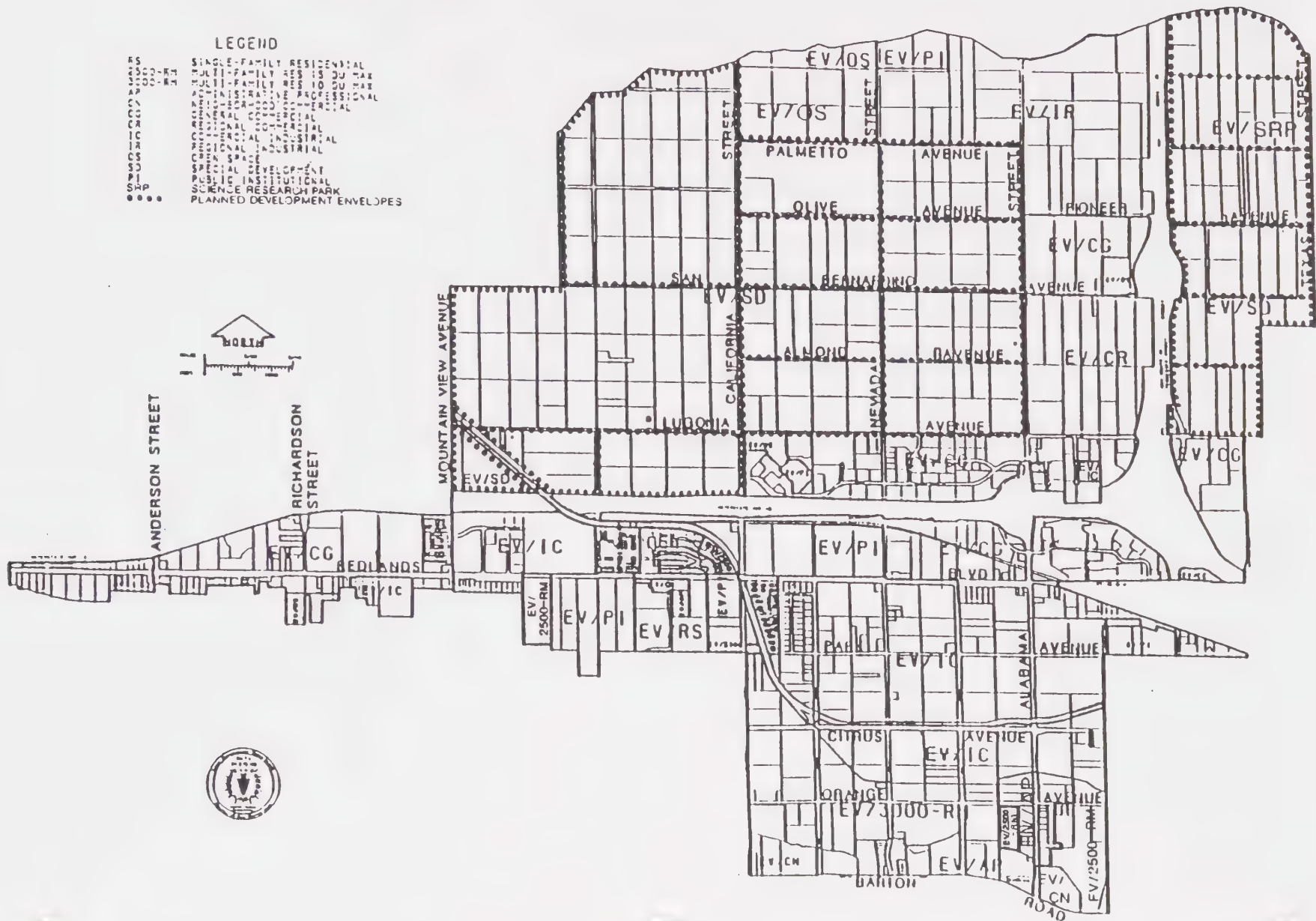
- (b) If review of the preliminary information provided indicates that providing adequate infrastructure or public services may require additional funding from public agencies beyond normal service costs, the applicant will be required to prepare a Fiscal Impact Analysis.
- (c) The Fiscal Impact Analysis shall further evaluate and quantify the identified fiscal impacts, including costs and revenues generated, and shall propose means for mitigating any negative impacts, including the provision of infrastructure at the developer's expense.

- (d) Those projects that are found to have a significant negative fiscal impact which are not mitigated may still be allowed to develop if the County/City of jurisdiction finds that the employment generating or other economic benefits of the project outweigh the project's fiscal impacts on infrastructure and public services.

PLANNED DEVELOPMENT ENVELOPES

GENERAL PROVISIONS

City of Redlands
as amended July 2, 1996



CHAPTER 4. PLANNED DEVELOPMENT PROCEDURES**Section EV1.0401 General Provisions****(a) Planned Development Defined**

A Planned Development is a large, integrated development consisting of commercial, industrial or administrative/professional uses, or a mixture of such uses and associated ancillary uses and structures, that is located within one or more development envelopes as defined in this Section.

(b) Development Envelopes Defined

- (1) Within the East Valley Corridor Planned Development District, certain areas have been designated as Development Envelopes. Development Envelopes are areas with common constraints and development opportunities, and constitute the minimum area which must be planned as a single unit. A developer may combine two or more Development Envelopes to plan for a larger area within a single Planned Development, provided that all parcels are contiguous or separated only by a road, right-of-way or easement. Planned Development Envelopes are shown in Figure 1-1.
- (2) Any Planned Development (PD) application filed within a Development Envelope must address the development of all property within that Development Envelope. Provided, however, that approval of the Planned Development shall be limited to approval of a Concept Plan in accordance with Section EV1.0405 unless the applicant for the PD is the property owner of record for the entire Development Envelope.

(c) Phasing

In a phased development, safeguards shall be required in the form of easements or bonds or other commitments for open space requirements that will protect the integrity of the total project.

(d) Subdivision

When a tentative subdivision map is filed with a planned development project, prior to recordation of the final subdivision map, the following items shall be filed with the appropriate agency:

- (1) Documentation of easements, covenants, deeds and Property-Owner Association by-laws, restrictions and articles of incorporation.
- (2) Sureties and performance bonds covering open space areas, dedicated public improvements, and other items as determined by the reviewing authority. The amount of the performance bonds shall be reviewed annually by the appropriate agency.

Section EV1.0405 Planned Development Applications

A Planned Development may be submitted in the form of a detailed site plan combining the concept and development stages into a single process; or the PD may be submitted in stages depending on the degree of project design or land use commitment desired by the applicant or the reviewing agency. The stages of the PD process are as follows:

(a) Concept Plan

(1) Concept Plan Defined

The Concept Plan functions as a development suitability analysis and land use plan which identifies development opportunities and constraints within the Development Envelope, including physical characteristics, public services and facilities, capacity of the circulation system, and existing or planned uses of adjacent properties. The intent of the Concept Plan is to establish limits, parameters, and planning objectives to guide development based on the identified development constraints and opportunities.

(2) Concept Plan Requirements

The Concept Plan shall provide information on the following issues:

- (A) The location, boundaries and acreages of the general land use types proposed within the Development Envelope, including open space.
- (B) Existing and proposed land uses and streets within 500 feet of the project area boundaries, and anticipated impacts on adjacent land uses.

- (C) The proposed circulation system, including both vehicular and pedestrian systems and general locations of access points to major and secondary roadways.
 - (D) Anticipated impacts on the existing circulation network and infrastructure systems.
 - (E) Where applicable, a development program establishing the phasing and/or sequence in which the various development areas are to be developed. Each phase shall include sufficient development to enable that phase to exist as an independent entity integrated with previous phases, but not dependent upon later stages of construction.
- (b) Development Plan
- (1) Development Plan Defined
 - (A) The Development Plan functions as a comprehensive, detailed plan of development for the PD which is based upon the approved Concept Plan. The Development Plan is appropriate for large-scale, mixed use or multi-phased developments under single or cooperative ownership.
 - (B) The Development Plan shall address the following issues:
 - (i) Proposed land uses and building types, the functional arrangement of such uses and building types and relationship to site, site grading, circulation, lighting, paving, parking, screening, setbacks, recreation and open space areas, and adjacent properties;
 - (ii) The level of public services and facilities required by the proposed development and the program for providing, operating and maintaining such services and facilities;
 - (iii) Access and circulation requirements and proposed improvements;
 - (iv) Known man-made and natural hazards and methods for mitigation of such hazards;

- (v) Significant features and areas to be retained for common open space, and provisions for the preservation, conservation, utilization and maintenance of such areas.
- (c) The following procedures shall be used in the processing of Development Plans:
 - (1) A Development Plan which involves only the approval of a site plan and uses listed as "permitted" in Division 3 of this Specific Plan shall be subject to the "Commission Review and Approval" process as established in the Redlands Municipal Code.
 - (2) Conditionally permitted use(s) which are proposed to be located within the boundaries of a Development Plan shall require individual Conditional Use Permit(s).
 - (3) When a "conditionally permitted use" occupies only a portion of the Development Plan area, the Commission Review and Approval process shall be used to review and approve the overall Development Plan, and a separate Conditional Use Permit shall be required for each individual conditionally permitted use.
 - (4) Those portions of a Development Plan for which sufficient detail was not available to comply with the requirements for a Commission Review and Approval at the time of the approval of the overall Development Plan shall require individual Commission Review and Approval and, if required by Division 3 of this Specific Plan, Conditional Use Permits.
 - (5) As noted in Division 3 of this Specific Plan, all new construction is subject to Commission Review and Approval, as established in the Redlands Municipal Code.
- (d) Subdivision

When a tentative subdivision map is filed with a planned development project, prior to recordation of the final subdivision map, the following items shall be filed with the appropriate agency:

- (1) Documentation of easements, covenants, deeds and Property-Owner Association by-laws, restrictions and articles of incorporation.

- (2) Sureties and performance bonds covering open space areas, dedicated public improvements, and other items as determined by the reviewing authority. The amount of the performance bonds shall be reviewed annually by the appropriate agency.

(2) Development Plan Requirements

The Development Plan shall include a written text describing the proposed project and development standards, and mapped information clearly showing the pertinent features of the proposed development, as well as conditions on and around the site affecting the overall design of the project.

- (A) The written portion of the Development Plan shall include the following elements:

(i) Project description, including:

- Legal description
- Name of project, owner, developer and/or builder
- Proposed use
- Existing site conditions
- Total site area
- Total building area
- Floor to lot area ratio
- Development schedule
- Prospective phasing

(ii) Tabulation of each phase, including:

- Land use
- Estimated population and density
- Building, open space, parking and road coverage ratio by land use in acres and percentage
- Linear feet of street and percent grade
- Site alteration (grading in cubic yards)
- Number of commercial, office or industrial employees, and estimated number of customers (if applicable)
- Types of uses planned, by square footage
- Floor to lot area ratio
- Parking spaces required and provided

- (iii) Land Use Section, including standards for lot size, building density, population density, height, bulk, setbacks, and other development standards which are proposed to be established by the PD.
- (iv) Public Services and Facilities Section, including project setting in relation to schools, parks, medical facilities, libraries and other community facilities (as applicable); services and facilities to be provided as part of this project, and agencies providing them; and costs for such services and utilities in relation to the Specific Plan financing plan, including those costs which may be determined to be reimbursable.
- (v) Circulation Section, describing the standards, approximate costs, mileage, and type of financing for construction and maintenance of roads, rail, trails, public transit facilities and other public transportation systems. This section shall also discuss impacts of the proposed project on the circulation network in terms of average daily trips and peak hour trips generated currently and at project buildout.
- (vi) Conservation and Open Space Section, describing proposed open space and recreation facilities, and preservation of natural features such as palm rows, cultural resources, citrus, or other natural resources.
- (vii) Public Safety Section, including seismic, flood or other safety hazards affecting the site, and safety features for protection of the project from hazard.
- (viii) Noise Section, describing existing or proposed noise generators on or near the site, such as highways, freeways, rail lines, airports, etc., along with standards for the protection of present and future site occupants from noise disturbances associated with such features.

- (ix) Design Element, describing design features of the project in relation to the requirements and guidelines set forth in Division 4 of the Specific Plan. This section shall discuss any major site design features, use of landscaping, screening, architectural excellence or other design amenities provided in the project.
 - (x) Appendix, including names, addresses and phone numbers of project owner, developer, and professional consultants, and names and address of all property owners. The appendix shall also contain any supporting technical reports prepared for the project.
- (B) The mapped portion of the Development Plan shall include the following maps:
 - (i) A small-scale vicinity map showing the relationship of the site to natural and man-made features and facilities near the site.
 - (ii) A base map showing the site and surrounding area within 500 feet, including the location of natural contours and drainage features at two (2) foot intervals; the location of any existing Washingtonia Robusta palms; and existing structures, improvements, excavations, easements and roadways.
 - (iii) An information map identifying seismic, flood, noise, scenic or cultural resources as described in the text, along with a preliminary grading plan showing proposed cut and fill areas and grading elevations.
 - (iv) A land use and circulation design, including lot layouts and structures with dimensions, proposed uses, and setbacks. Proposed circulation improvements shall include location, width and

names of proposed streets or highways, public transit routes, bikeways, pedestrian ways, riding and hiking trails, and parking facilities, including the number of spaces provided. This map shall also show mature trees to be retained, relocated or removed; any proposed phasing of the development; and major site design features.

- (v) Aerial photo of the site (if available).
- (vi) Maps (A) through (D) shall be of a uniform scale sufficient to clearly identify Development Plan features included on the site and within five hundred (500) feet of the property line.

Section EV1.0415 Application Procedures

- (a) An application for a Concept Plan shall encompass all the land within the Planned Development. An application for a Development Plan or use permit may be for a portion of the land included within the PD, or a phase thereof, provided that each phase shall function as a complete and separate development from the remaining phases.
- (b) Prior to the formal submission of a Planned Development application, the applicant shall meet with the Review Committee of the reviewing agency in order to acquaint the applicant with the procedural requirements of the PD provisions, and to discuss the general acceptability of the plan and its compatibility with, or deviation from, applicable policies, issues and development regulations.
- (c) Application for a Planned Development shall be reviewed and processed under the applicable regulations of the local jurisdiction.
- (d) Amendments to a Concept Plan or Development Plan shall be procedurally processed and reviewed in the same manner as the adoption of a Concept Plan and Development Plan.

CHAPTER 5. AMENDING THE SPECIFIC PLAN**Section EV1.0501 Intent**

It is the intent of this Chapter to define types of changes that will require amendment of the East Valley Corridor Specific Plan, and to outline amendment procedures.

Section EV1.0505 Procedure

- (a) Any proposed Specific Plan Amendment which will result in substantial changes to the infrastructure systems of the Specific Plan as outlined in Section EV1.0515 (c) and (d), or in substantial changes to the financing plan by virtue of the changes in land use proposed, shall be reviewed by the Executive Committee of the Joint Powers Agency created pursuant to Section EV1.0605 if it is then in existence. If the Executive Committee determines that the amendment does not meet the intent of the Specific Plan, the referring agency shall be notified. The local agency may, after a public hearing, overrule the Joint Powers Agency.
- (b) Amendments to the Specific Plan map or text shall be processed in accordance with the adopted procedures of the reviewing agency, and shall be adopted by the legislative body of the governing jurisdiction. The agency shall notify the other planning agencies within the Specific Plan area of any such changes within thirty (30) days but the Specific Plans adopted by those other agencies shall not be amended by such amendment unless those other agencies take specific action to amend their plans and consent of those agencies to the amendment shall not be required.

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CHAPTER 6. SPECIFIC PLAN IMPLEMENTATION**Section EV1.0601 Intent**

It is the intent of the East Valley Corridor Specific Plan to provide for mechanisms to implement and administer all components of the Plan program. These components include planning, financing, infrastructure construction and maintenance, marketing and coordination. The implementation procedures developed for these components are intended to provide for flexibility and efficiency in administering the Specific Plan.

Section EV1.0605 Administrative Authority

- (a) A public agency may be created pursuant to the Joint Powers provisions of Article I, Chapter 5, Division 7, Title 1 of the California Government Code, Sections 6500 et. seq. This agency shall be separate from the County of San Bernardino, the City of Redlands, the City of Loma Linda and CSA-110, and shall utilize powers common to these parties to manage, coordinate, market and administer the programs of the East Valley Corridor Specific Plan. The agency's purposes may include, but not be limited to, the following:
 - (1) Assist in the coordination of the parties implementing the East Valley Corridor Specific Plan;
 - (2) Assist development of joint powers financing for and implementation of inter-jurisdictional capital improvements, infrastructure improvements, and other uses, through various financial mechanisms;
 - (3) Coordinate private sector input to financial programs, development programs, and other Specific Plan projects;
 - (4) Implement a joint marketing program for the Specific Plan area.
- (b) The agency created pursuant to this Section shall be administered by a governing body, which shall exercise all of the power and authority of the agency and which shall be known as the Executive Committee of the agency.
 - (1) Each Party to the Joint Powers Agreement shall designate and appoint, by resolution of its governing body, one (1) member of its governing body to act as its Executive Committee member, and one (1) other member of its governing body to act as its alternate.

- (2) Terms of office, meetings, officers, staff, financing and accounting of the Executive Committee shall be established by the Joint Towers Agreement.
- (c) The agency's powers may include but not be limited to following:
 - (1) To make and enter contracts, leases and other agreements;
 - (2) To employ agents, employees, consultants, advisors, independent contractors and other staff;
 - (3) To incur debt, liabilities or obligations;
 - (4) To acquire, hold or dispose of property, both inside and outside the boundaries of the Specific Plan;
 - (5) To acquire, construct, manage, maintain, and operate any buildings, works or improvements, both inside and outside the boundaries of the Specific Plan;
 - (6) To issue bonds, notes, warrants and other evidences of indebtedness to finance costs and expenses incidental to the projects of the agency; and
 - (7) Other powers as deemed to be necessary to implement the Specific Plan and as included in the Joint Powers Agreement.

Section EV1.0610 Infrastructure Financing Implementation Program

- (a) The purpose of this section is to provide the basic guidelines for the Implementing Financing Strategy of the East Valley Corridor Specific Plan in both the long and the short term.

The financing implementation program consistent with the following four points:

- (1) Following the adoption of the Specific Plan, an Assessment Engineer shall be retained to further refine and detail the benefit assessment analysis for the project area. This will provide the basis for allocating infrastructure costs. Subsequent funding mechanisms may then be developed using the benefit assessment analysis as a benchmark.

- (2) The objective of the infrastructure financing program is to insure that the costs of providing the required to development, commensurate with the benefits provided. In order to spread costs equitably, provisions will be made to provide reimbursements and credits for projects that provide oversized facilities beyond what would normally be needed for an individual project.
- (3) The permanent financing program that is ultimately adopted may include some mix of funding mechanisms such as, existing fees and charges, Mello-Roos, assessment districts, development fees, or "pay as you go", on a project by project basis. All of the facilities within the infrastructure plan need to be provided, including costs for those components of the infrastructure plan that would not be captured under a "pay as you go", approach. For example, signalization landscaping, and improvements in areas that are partially developed may be missed under an incremental, project by project approach. Provisions will be made to capture such costs.

Provisions will also be made so that the most basic facilities needed to ensure orderly development are provided in a timely and effective manner.

- (4) During the interim period between adoption of the Specific Plan and completion of the permanent financing program an interim fee or financing mechanism of \$45,000.00 dollars per acre, or some other assured funding mechanism to cover full costs as agreed to by all jurisdictions, shall be adopted for projects built within the plan area. Provisions will also be made for developer reimbursements if, when completed, the assessment analysis described under Subsection EV1.0610 (a) (1) shows that the fees paid exceeded the benefit provided.

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DIVISION 2. PLAN FOUNDATION**CHAPTER 1. GENERAL PROVISIONS****Section EV2.0101 Intent**

This Division provides the basis for the land use districts, overlay districts and special community development standards contained in Divisions 3, 4 and 5 of the East Valley Corridor Specific Plan. The location of each land use district and the development proposed in any land use district shall conform to the intent of the goals, policies and objectives of this Division.

Section EV2.0102 Format

The purpose and intent of the East Valley Corridor Specific Plan, as identified through public participation in the planning process, is stated in the Plan Axiom.

Goals are general statements identifying land use strategies which should be adopted to achieve the intent as stated in the Axiom. More explicit statements of intention, or Policies, are derived from the Goals, which set the stage for future actions. Objectives are very specific measures which will be adopted to carry out the preceding Policies.

Taken as a whole, the Axiom, Goals, Policies and Directives constitute the foundation for subsequent standards, regulations and commitments described in remaining Divisions, and represent the directives and actions which the Community, the County, and the Cities of Loma Linda and Redlands have deemed appropriate and necessary to guide the area's future development.

Section EV2.0103 Reference to General Plans

The East Valley Corridor Specific Plan focuses on locally important planning issues. Reference should be made to the General Plans of the County and the Cities of Loma Linda and Redlands for those issues not covered in the East Valley Corridor Specific Plan.

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CHAPTER 2. AXIOM, GOALS, POLICIES AND OBJECTIVES

Section EV2.0201 Axiom

The intent of the East Valley Corridor Specific Plan is to promote and facilitate aesthetically pleasing job and revenue producing development that responds to physical, environmental, and economic opportunities and constraints.

Section EV2.0205 Land Use and Planning

- (a) GOAL: Develop the East Valley Corridor Specific Plan so as to promote and facilitate high-quality commercial, industrial and residential development within the Corridor area.
 - (1) POLICY: Maximize generation of employment opportunities in a region which has a significant imbalance of housing versus employment opportunities.
 - (A) OBJECTIVE: Create compatible, cohesive enclaves where industry can locate and operate without the encroachment of other non-compatible urban uses.
 - (B) OBJECTIVE: Attract a wide range of employment opportunities through promotion of the East Valley Corridor by various marketing strategies.
 - (C) OBJECTIVE: Create a land use plan that is responsive to market demands by developing the Special Development district.
 - (2) POLICY: Facilitate location in the project area of a wide range of commercial uses to serve the region, local industry, and residential neighborhoods.
 - (A) OBJECTIVE: Establish the Regional Commercial designation at the intersection of Interstate 10 and Route 30.
 - (B) OBJECTIVE: Provide for and recognize existing General Commercial uses along Redlands Boulevard and Alabama Street.

- (C) OBJECTIVE: Establish Neighborhood Commercial designations adjacent to residential development along Barton Road.
 - (D) OBJECTIVE: Provide for a variety of commercial uses within the Special Development district.
- (3) POLICY: Support a limited amount of residential land use within the planning area.
 - (A) OBJECTIVE: Designate land use districts for single residential use at a maximum density of six (6) units per acre and multiple residential use at a maximum density of fifteen (15) units per acre.
 - (B) OBJECTIVE: Recognize existing residential land uses and support their logical extension where services are available.
 - (C) OBJECTIVE: Limit residential uses adjacent to freeways and within the 65 CNEL noise areas.
 - (D) OBJECTIVE: Adopt design standards to protect residential uses from adjacent incompatible uses.
- (4) POLICY: Preserve existing viable agricultural activities in the East Valley Corridor as long as feasible while the area transitions to more intensive uses.
 - (A) OBJECTIVE: In Planned Unit Developments, encourage phasing of projects to preserve agricultural uses as long as possible.
 - (B) OBJECTIVE: Permit continuation of agriculture in all land use districts as an interim use.
- (b) GOAL: Simplify and streamline the development review process while maintaining consistency with adopted General Plans for the Corridor area.
 - (1) POLICY: Develop the land use map in conformance with, and implement the policies of, the General Plans of San Bernardino County and the Cities of Redlands and Loma Linda and with other regional plans.

- (A) OBJECTIVE: Ensure zoning conformance with the General Plans of the three jurisdictions.
 - (B) OBJECTIVE: Facilitate growth in the industrial sector consistent with the SCAG82 directive to balance the provision of jobs and housing in the Inland Empire region and to provide employment for a wide range of individuals and income groups.
 - (C) OBJECTIVE: Consistent with the regional Air Quality Management Plan, adopt performance standards to protect and improve air quality to attain State and Federal standards.
 - (D) OBJECTIVE: Protect regional groundwater resources in the Corridor area in conformance with the 208 Waste Treatment Management Plan.
- (2) POLICY: Reduce unnecessary delays in the development review processes for the Corridor by adopting one plan which crosses jurisdictional boundaries.
- (A) OBJECTIVE: Amend the General Plans for the area with adoption of the Specific Plan to permit more intensive uses in the planning area.
 - (B) OBJECTIVE: Complete and certify one Environmental Impact Report for the planning area to assess impacts and provide mitigation measures for development which is consistent with the Specific Plan.
 - (C) OBJECTIVE: Adopt development and design standards which are consistent throughout the planning area.
 - (D) OBJECTIVE: Adopt streamlined processing procedures with fewer steps by eliminating multi-jurisdictional review, to expedite the review of development proposals in the East Valley Corridor.

Section EV2.0210 Environmental Issues

- (a) GOAL: Develop a Specific Plan that is responsive to physical and environmental constraints and opportunities.

- (1) POLICY: Identify natural hazards within the planning area and adopt development standards to mitigate these hazards.
 - (A) OBJECTIVE: Adopt the Health and Safety Overlay District map and text to address identified flood and noise impacts.
- (2) POLICY: Develop a comprehensive storm drain system adequately sized and designed to accommodate stormflows from all present and future development within the Plan area.
 - (A) OBJECTIVE: Design a drainage system to safely channel stormwater flows through developed areas and control runoff.
 - (B) OBJECTIVE: Coordinate the construction of a comprehensive storm drain system with individual projects in the Specific Plan area to ensure that all new development will be adequately protected from flooding prior to completion of the backbone system, and that all systems are adequately linked.
 - (C) OBJECTIVE: Develop a schedule for funding all flood control facilities, including phasing.
 - (D) OBJECTIVE: Coordinate with the U.S. Army Corps of Engineers on design and financing of channel improvements for the Mission Zanja.
- (3) POLICY: Identify natural resources within the planning area and adopt strategies to protect and preserve these resources.
 - (A) OBJECTIVE: Identify and adopt tree preservation techniques for existing Mexican fan palm rows.
 - (B) OBJECTIVE: Identify and designate in the Preservation Overlay District significant historical sites within the Specific Plan, and adopt guidelines to ensure their preservation.
 - (C) OBJECTIVE: Develop design standards to ensure positive views of the planning area and vicinity from the freeway system.

Section EV2.0215 Community Services and Facilities

- (a) GOAL: The Specific Plan should provide for extension of public services in a logical and functional manner to minimize impacts on service purveyors while maximizing areas that can accommodate development in a timely manner.
 - (1) POLICY: Complement the land use planning for the East Valley Corridor with comprehensive plans and programs for utilities and public facilities.
 - (A) OBJECTIVE: Conduct planning and engineering of backbone facilities for water distribution and sewerage systems concurrent with preparation of the Specific Plan.
 - (B) OBJECTIVE: Coordinate the phasing of new development in the Corridor with installation of public improvements in such a way as to allow for orderly site development and minimize cost.
 - (C) OBJECTIVE: Facilitate the coordination of local agencies and service purveyors to implement the land use plan and phasing plan.
 - (2) POLICY: Develop financing techniques to provide for extension of infrastructure facilities in the project area.
 - (A) OBJECTIVE: Prepare a financing plan to assess financing needs and alternatives concurrent with preparation of the Specific Plan.
 - (B) OBJECTIVE: Identify funding methods which will facilitate the participation of all levels of government in providing funding for the required infrastructure.
 - (C) OBJECTIVE: Where development fees for community facilities have been adopted by any jurisdiction within the plan area, Specific Plan properties within that jurisdiction shall participate in said fee program.

- (3) POLICY: Develop opportunities for community oriented services within the plan area.
 - (A) OBJECTIVE: Permit child care facilities in any district subject to Site Approval. Provide incentives for day care facilities within employment centers. Small family day care homes are exempt from these provisions.
 - (B) OBJECTIVE: Provide for a variety of cultural and recreational uses to serve all age groups.

Section EV2.0220 Transportation

- (a) GOAL: Design a comprehensive, functional and efficient circulation system of sufficient capacity to accommodate projected traffic demands at all phases of development, which is consistent with regional master transportation plans.
 - (1) POLICY: Provide safe and convenient access and circulation to all development within the East Valley Corridor.
 - (A) OBJECTIVE: Require all new development to meet mandatory standards for alignments, access control, rights-of-way, cross-sections, intersections, sidewalks, curbs and gutters, cul-de-sacs, driveway widths and grades, right-of-way dedications and improvements, and handicap requirements.
 - (B) OBJECTIVE: Provide sufficient roadway and intersection capacities to maintain a minimum level of service "C".
 - (2) POLICY: Design a system of major arterials to accommodate traffic volumes associated with projected land uses and densities throughout the Plan area.
 - (A) OBJECTIVE: Adopt a circulation plan with a system of arterial roadways, including secondary highways, major highways and six-lane arterials.
 - (B) OBJECTIVE: Develop road standards for designated arterials.

- (3) POLICY: Protect the designed capacity of all arterials in the planning area.
 - (A) OBJECTIVE: Through the design review process, require shared driveways where possible on highways and arterials.
 - (B) OBJECTIVE: Prohibit direct driveway access from individual residences onto highways and arterials.
- (4) POLICY: Design a circulation system consistent with regional transportation planning for the East Valley area.
 - (A) OBJECTIVE: Coordinate with local, regional and state agencies to ensure that the circulation plan is compatible with and contributes to the effectiveness of the regional transportation system.
- (B) GOAL: Adopt energy-efficient transportation strategies to implement State and County goals for reduced energy consumption and improved air quality.
 - (1) POLICY: Designate land uses so as to reduce the number and length of vehicle trips in the East Valley Corridor.
 - (A) OBJECTIVE: Maximize local employment opportunities and the provision of services and shopping facilities within the Corridor through appropriate land use designations, to decrease commuter trips.
 - (B) OBJECTIVE: Establish land use designations on the land use map for a range of residential densities in proximity to employment and commercial centers.
 - (2) POLICY: Provide opportunities for alternative travel modes to supplement the private automobile.
 - (A) OBJECTIVE: Require bus turn-outs and shelters in accordance with recommendations of public transit agencies.
 - (B) OBJECTIVE: Cooperate with regional transportation efforts to identify and implement traffic management programs such as ride sharing and staggered work hours.

- (C) OBJECTIVE: Develop a comprehensive, convenient pedestrian circulation system linking private developments and public sidewalks.
- (D) OBJECTIVE: Design a trail system linking to regional trail systems for pedestrian, bicycle and equestrian use.

Section EV2.0225 Community Design

- (a) GOAL: Promote high quality development in the East Valley Corridor by protecting and enhancing existing amenities in the area, creating an identifiable community character, and adopting development standards and guidelines to ensure aesthetically pleasing design and maximum land use compatibility.
 - (1) POLICY: Establish development standards to implement Specific Plan goals and policies.
 - (A) OBJECTIVE: Adopt mandatory development standards and require that all projects meet minimum requirements in order to be consistent with the Specific Plan.
 - (B) OBJECTIVE: Establish incentives to encourage development that more fully implements Specific Plan objectives.
 - (C) OBJECTIVE: Include in the Specific Plan text a complete set of development and design standards applicable to development in the East Valley Corridor, without requiring reference to other documents.
 - (2) POLICY: Establish design themes to unify the Corridor area and provide a recognizable community character within the area.
 - (A) OBJECTIVE: Design streetscapes and intersections which are consistent throughout the planning area with regard to setbacks, plant materials, sidewalk and parkway treatment, and use of medians.
 - (B) OBJECTIVE: Provide identifiable entryways into the East Valley Corridor along the freeway system and major arterials.

- (C) OBJECTIVE: Preserve existing Mexican fan palm rows and extend palm row plantings along selected major arterials both north and south of Interstate 10.
- (3) POLICY: Create a visually aesthetic appearance for the East Valley Corridor from the freeways as well as from within the planning area.
 - (A) OBJECTIVE: Require that negative views such as loading, service and refuse areas be screened from public view.
 - (B) OBJECTIVE: Encourage use of ground-mounted equipment where possible, and require screening of roof-top equipment through use of wells, parapet walls and other architectural means.
 - (C) OBJECTIVE: Adopt minimum landscaping requirements for parking areas and yard areas adjacent to public rights-of-way.
 - (D) OBJECTIVE: Establish incentives to encourage provision of visual amenities such as artwork, fountains, plazas, and increased landscaping.
 - (E) OBJECTIVE: Preserve open space along specified scenic corridors by requiring increased setbacks for development.
 - (F) OBJECTIVE: Through the development review process, ensure preservation of scenic vistas at various points throughout the Corridor area by discouraging continuous building facades along street and freeway frontages.
 - (G) OBJECTIVE: Preserve positive views of unique historical or architectural features such as Edwards Mansion, the County Museum, and the Asistencia Mission.
 - (H) OBJECTIVE: Adopt standards for lighting, fencing and signs to enhance overall community design.
- (4) POLICY: Encourage effective use of landscaping within the East Valley Corridor.

- (A) OBJECTIVE: Require use of recommended drought tolerant plant species and automatic irrigation systems for landscaped areas to conserve water.
 - (B) OBJECTIVE: Require use of landscape materials and designs which facilitate solar access and provide shade at appropriate seasons and times of day.
 - (C) OBJECTIVE: Require prompt revegetation on newly graded areas to control erosion.
 - (D) OBJECTIVE: Develop mandatory standards relative to tree type, size and spacing for streets, center medians, parkways, parking lots and trails.
- (5) POLICY: Ensure compatibility between adjacent land use types within the Corridor area.
- (A) OBJECTIVE: Adopt standards to establish adequate buffers between industrial/commercial and adjacent residential uses through use of landscaping, grading, setbacks and/or walls.

Section EV2.0230 Open Space

- (a) GOAL: Create parks and open space areas which will meet the community's recreation needs in a meaningful way, and create areas which will enhance and add value to the community as a whole.
- (1) POLICY: Enhance the beauty of the East Valley Corridor and the overall quality of life for users and residents of the area.
 - (A) OBJECTIVE: Provide identifiable entryways into the East Valley Corridor along the freeway system and major arterials.
 - (B) OBJECTIVE: Create significant landscaped open space areas at the entry and exit points of the East Valley Corridor.
 - (C) OBJECTIVE: Identify significant arterials which should be enhanced through medians and/or landscaped parkways, and identify planting guidelines.

- (D) OBJECTIVE: Through the development review process, preserve view corridors to the Mexican Fan Palm rows, scenic streets and intersections, scenic focal points, and the surrounding mountains.
 - (E) OBJECTIVE: Improve the landscaping of and views to and from both freeways.
- (2) POLICY: Plan for the development of additional recreational facilities within the Plan area.
- (A) OBJECTIVE: Establish a linear park along the Santa Ana River bluff.
 - (B) OBJECTIVE: Designate locations for trails throughout the Plan area as linkages between open space areas, as well as along the Zanja and the Santa Ana River.
 - (C) OBJECTIVE: Wherever possible, utilize existing public lands for parks, recreation and open space in order to minimize costs.
 - (D) OBJECTIVE: Encourage the provision of recreational facilities by private developers on specific projects through use of a floor area ratio bonus incentive.

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DIVISION 3. COMMUNITY LAND USE**CHAPTER 1. GENERAL PROVISIONS****Section EV3.0101 Introduction**

This division provides land use regulations for the area included in the East Valley Corridor Specific Plan. The land use regulations adopted in this Plan are intended to promote, protect and secure the public health, safety and general welfare, to provide the social and economic advantages resulting from an orderly, planned use of land and resources, and to encourage, guide, and provide a definite plan for the future growth and development of the East Valley Corridor.

Section EV3.0105 Land Use Map as Part of Specific Plan

The Land Use District Map, showing the classifications and boundaries of land use districts and all notations, references, and other information shown therein, after final adoption in the manner required by law, shall thereafter be as much a part of this Specific Plan as if all the matters and information set forth by said map were fully described herein.

Section EV3.0110 Establishment of Land Use Districts

In order to carry out the provisions of the Specific Plan, the following land use districts are established:

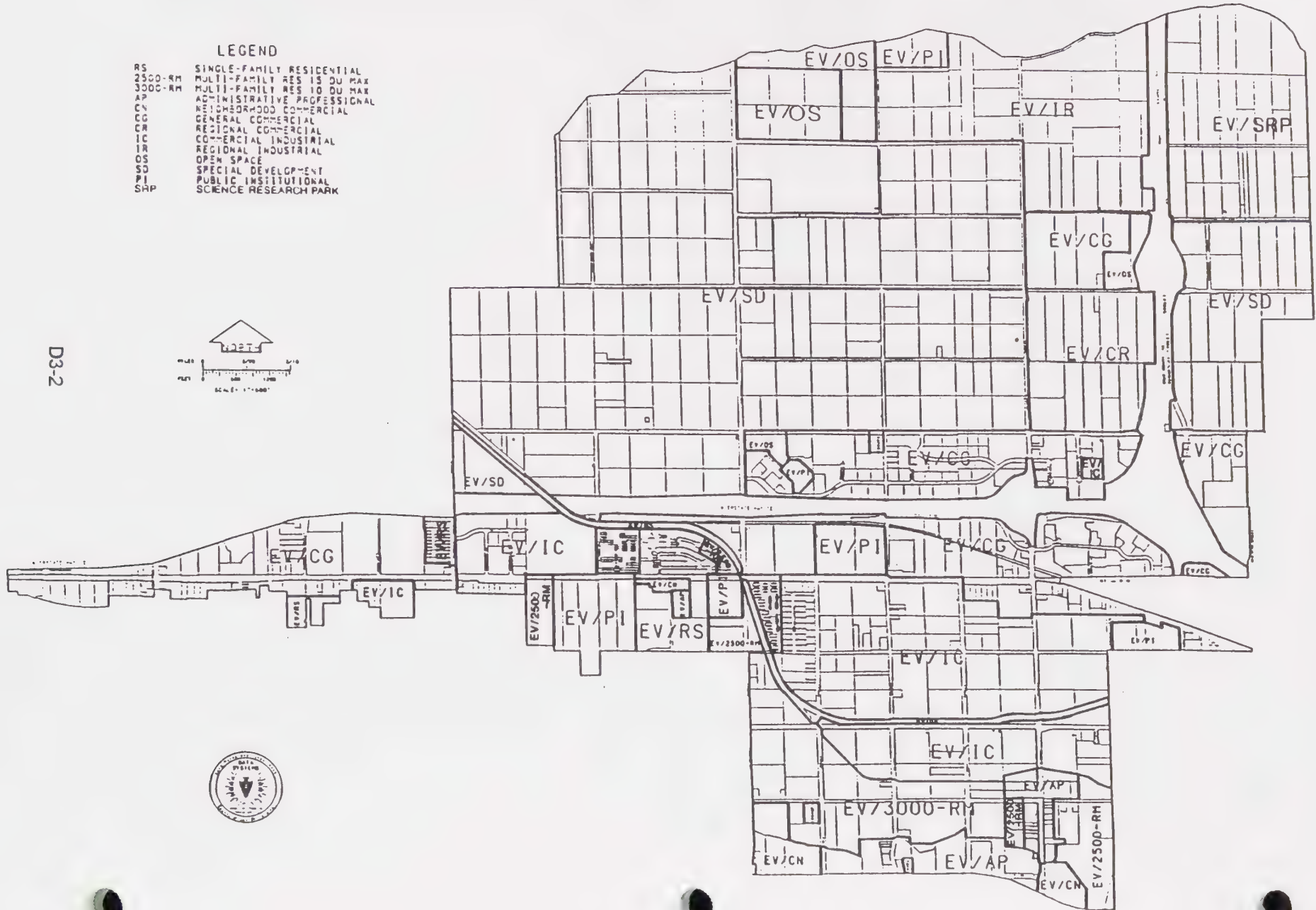
- Single Family Residential (RS)
- Multiple Family Residential-3000 (3000-RM)
- Multiple Family Residential-2500 (2500-RM)
- Administrative-Professional (AP)
- Neighborhood Commercial (CN)
- General Commercial (CG)
- Regional Commercial (CR)
- Commercial Industrial (IC)
- Regional Industrial (IR)
- Special Development (SD)
- Public Institutional (PI)
- Open Space (OS)
- Science Research Park (SRP)

EAST VALLEY CORRIDOR SPECIFIC PLAN

LAND USE DISTRICTS

LEGEND

RS	SINGLE-FAMILY RESIDENTIAL
2500-RM	MULTI-FAMILY RES 15 DU MAX
3000-RM	MULTI-FAMILY RES 10 DU MAX
AP	ADMINISTRATIVE PROFESSIONAL
CV	NEIGHBORHOOD COMMERCIAL
CG	GENERAL COMMERCIAL
CR	REGIONAL COMMERCIAL
IC	COMMERCIAL INDUSTRIAL
IR	REGIONAL INDUSTRIAL
OS	OPEN SPACE
SD	SPECIAL DEVELOPMENT
PI	PUBLIC INSTITUTIONAL
SHP	SCIENCE RESEARCH PARK



Section EV3.0115 Districts Adopted with Specific Plan

The boundaries of such districts, as shown on any Land Use District Map adopted by this Specific Plan or amendment thereto, are hereby adopted and approved and the regulations of this Specific Plan, governing the uses of land, buildings, structures, the height of buildings and structures, the sizes of yards abutting buildings and structures and other matters as hereinafter set forth, are hereby established and declared to be in effect upon all land included within the boundaries of each and every district shown upon the Land Use Map.

Section EV3.0120 District Boundary Uncertainties

Where uncertainty exists as to the boundaries of any district shown on the Land Use District Maps, the following rules shall apply:

- (a) Where such boundaries are indicated as approximately following street and alley lines, lot lines, or topographic features such as drainage channels, such lines or features shall be construed to be such boundaries.
- (b) In non-subdivided property, and where a district boundary divides a lot, the locations of such boundaries, unless indicated by dimensions, shall be determined by use of the scale appearing on the map.
- (c) Where any uncertainty exists, the Planning Commission of the governing jurisdiction shall determine the location of boundaries.
- (d) Where a public street or alley is officially vacated or abandoned, the regulations applicable to the property to which it reverts shall apply to such vacated or abandoned street or alley.
- (e) Unless otherwise noted, land use district boundaries shall extend to street right-of-way centerlines.

Section EV3.0125 District Contents

Each Land Use District contains a statement of intent and locational standards. Each District also contains a listing of permitted and prohibited land use types, along with requirements for development within the District.

Section EV3.0130 District Amendments

The text or location of a Land Use District may be amended pursuant to the provisions of Section EV1.0505 of this Specific Plan and applicable regulations of the governing agencies.

Section EV3.0135 General Land Use Provisions

- (a) Except as otherwise provided in the Specific Plan and applicable zoning codes, buildings or structures shall be erected, reconstructed, structurally altered, enlarged, moved or maintained, and buildings, structures or land shall be used or designed to be used only for uses permitted in the zone in which such building, structure or land is located, and then only after applying for and securing all permits and licenses required by all laws and ordinances.
- (b) Where the terms "similar," "typical," or "including but not limited to" are used in the context of "similar" or "typical" uses or products, it shall be deemed to mean other products or uses which, in the judgment of the Director of Community Development as evidenced by a written decision, are similar to and not more objectionable to the general welfare than the products or uses listed in the same section. The Director of Community Development shall be specifically empowered to refer to the Planning Commission those determinations of similar uses which, in his or her opinion, warrant examination by that body. In all cases, the item(s) shall be examined pursuant to the process established in sections (c) and (d) below.
- (c) Prior to taking an action to find a use similar to and not more objectionable to the general welfare than the uses listed within the text of a zone district of this Division, the Director of Community Development or the Planning Commission shall find all of the following:
 - (1) That the use is not first listed as a permitted use in a less restrictive zone district.
 - (2) That the proposed use is compatible with the intent of the land use district and is applicable throughout the Specific Plan area in that land use district.
 - (3) That the proposed use is consistent with the Specific Plan.
 - (4) That the use is capable of meeting the standards, requirements and intent of the land use district.

- (5) That the use will not be more inappropriate or objectionable to the general welfare than the uses listed within the land use district.
- (d) The Director of Community Development shall notify the Planning Commission in writing of all approved determinations at the next available Commission meeting. The Director's decisions shall be presented as information items only, but may be appealed by a majority of the Commission members present at the meeting and acted upon at that time.
- (e) The Director of Community Development shall not be required to notify the Planning Commission of any requested determinations which he or she has denied. However, the applicant requesting the determination may appeal the Director's denial within ten (10) calendar days of the official notice of denial.

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CHAPTER 2. SINGLE FAMILY RESIDENTIAL DISTRICT**Section EV3.0201 Intent**

The Single Family Residential District creates, preserves and enhances neighborhoods where permanent, one-household residential uses are predominant.

Section EV3.0205 Locational Standards

- (a) The area is substantially occupied or will be occupied by one-family homes.
- (b) The area is served by appropriate public facilities, including recreation and neighborhood shopping facilities, and by major streets, generally located on the periphery of the neighborhood.
- (c) The area is free from environmental hazards that would significantly impact residential development.
- (d) There is a commitment to provide a full range of urban services to the area, including water, sewers, street systems, flood control, fire, police, schools, parks, libraries and medical facilities.
- (e) The location shall be consistent with the General Plan text and maps.

Section EV3.0210 Permitted Land Uses

The following uses are permitted within the Single Family Residential District. New construction shall require Commission Review and Approval if required by the Redlands Municipal Code.

- (1) Single family residential use, not to exceed one (1) dwelling unit per parcel.
- (2) Agriculture as a continuation of the existing land use, including orchards, groves, nurseries, field crops, tree crops, berry crops, bush crops, truck gardening and commercial flower growing, and all necessary structures and appurtenances thereof.

Section EV3.0212 Accessory Land Uses

The following uses are permitted as an accessory to a permitted or conditionally permitted use. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b):

- (1) Accessory building such as bath house, cabana, and storage shed
- (2) Garage or carport with space for maximum of four vehicles
- (3) Guest house (bathroom plumbing only; no kitchen facilities permitted)
- (4) Home occupation as defined in and subject to the requirements of the Redlands Municipal Code
- (5) Private greenhouse or horticultural collection incidental to the residential use of the premises
- (6) Private swimming pool, as defined by the Uniform Building Code.
- (7) Recreational facilities intended for use by the residents of a residential development and their guests, including playgrounds, tennis courts, athletic fields, and equestrian facilities.

Section EV3.0213 Conditionally Permitted Uses

The following uses may be permitted subject to approval of a Conditional Use Permit. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b):

- (1) Recreational facilities, including playgrounds, tennis courts, and athletic fields not intended for use by residents of a residential development and their guests.
- (2) Large family day-care home, serving seven to twelve children.
- (3) Second units ("granny flats") as defined and regulated by the Redlands Municipal Code.
- (4) Churches and other institutions facilitating worship.
- (5) Day care centers for thirteen or more children.

- (6) Board and care homes for more than six residents.
- (7) Adult day care facilities.
- (8) Public utilities and public service uses or structures including, but not limited to, reservoirs, pumping plants, electrical substations, central communication office, but not including any of the following: microwave and repeater huts and towers, satellite receiving stations, and cellular telephone antennae.

Section EV3.0215 Prohibited Land Uses

Any use not listed as permitted, conditionally permitted, or permitted as an accessory use is prohibited in the Single Family Residential District.

Section EV3.0220 Prohibited Building Types

- (a) Independent mobilehomes
- (b) Mobilehome parks

Section EV3.0225 Development Standards

- (a) Minimum lot area shall be 7200 square feet, except where the General Plan specifies a permitted density of less than six (6) units per acre, in which case the density shall be determined by the General Plan.
- (b) Minimum lot dimensions
 - (1) For lots from 7200 up to 14,000 square feet, minimum lot widths, measured at the building setback line, shall be sixty (60) feet on an interior lot, seventy (70) feet on a corner lot, and forty (40) feet on a cul-de-sac lot. Minimum lot depth shall be one hundred (100) feet.
 - (2) For lots of 14,000 square feet or greater, minimum lot width shall be one hundred (100) feet and minimum lot depth shall be one hundred twenty (120) feet.
- (c) Maximum population density shall be one dwelling unit per parcel.
- (d) Maximum coverage by structures shall be thirty (30) percent.

- (e) Maximum structure height shall be thirty-five (35) feet.
- (f) Minimum building setbacks shall be as follows:
 - (1)

Front yard	25 feet
Street side yard	15 feet
Side yards	5 feet & 10 feet
Rear yards	15 feet
 - (2) Where front or side street is designated as a Special Landscaped Street in Section EV4.0115 (a), see Section EV4.0115 for setback and landscaping requirements.
 - (3) Where side or rear yard abuts a Commercial, Industrial or Administrative Professional district, dwelling unit shall be set back at least twenty-five (25) feet from the property line.
 - (4) For permitted projections into yards, see zoning code of governing jurisdiction.

CHAPTER 3. MULTIPLE FAMILY RESIDENTIAL—3000 DISTRICT**Section EV3.0301 Intent**

The Multiple Family Residential—3000 District creates, preserves and enhances areas where two or more dwelling units on the same lot are predominant. This district provides for medium density development of a range of housing types to meet the varying needs of individuals and families in the East Valley Corridor area.

Section EV3.0305 Locational Standards

- (a) The area is substantially occupied or will be occupied by multiple family dwellings at a density not to exceed ten (10) dwelling units per acre.
- (b) The area is served by appropriate-public facilities, including recreation and neighborhood shopping facilities, and by major streets, generally located on the periphery of the neighborhood.
- (c) The area is free from environmental hazards that would significantly impact residential development.
- (d) There is a commitment to provide a full range of urban services to the area, including water, sewers, street systems, flood control, fire, police, schools, parks, libraries and medical facilities.
- (e) The location shall be consistent with the General Plan text and maps.

Section EV3.0310 Permitted Land Uses

The following uses are permitted within the Multiple Family-3000 Residential District. New construction shall require Commission Review and Approval as required by the Redlands Municipal Code.

- (1) Single family residential use, not to exceed one (1) dwelling unit per parcel.
- (2) Two-family dwellings or two (2) one-family dwellings of a permanent nature on each lot.
- (3) Multiple family dwellings of three (3) units or more, in either one (1) structure or a group of structures.

- (4) Agriculture as a continuation of the existing land use, including orchards, groves, nurseries, field crops, berry crops, bush crops, truck gardening and commercial flower growing and all necessary structures and appurtenances thereof.

Section EV3.0312 Accessory Land Uses

The following uses are permitted as an accessory use to a primary permitted or conditionally permitted use. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b):

- (1) Accessory building such as bath house, cabana, and storage shed.
- (2) Garage or carport.
- (3) Home occupation as defined in and subject to the requirements of the Redlands Municipal Code.
- (4) Private greenhouse or horticulture collection incidental to the residential use of the premises.
- (5) Recreational facilities intended for use by the residents of a residential development and their guests, including playgrounds, tennis courts, athletic fields, and private or public swimming pools (as defined by the Uniform Building Code).

Section EV3.0313 Conditionally Permitted Uses

The following uses may be permitted subject to approval of a Conditional Use Permit. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b):

- (1) Recreational facilities intended for use by the general public, including playgrounds, tennis courts and athletic fields.
- (2) Mobilehome parks, subject to the requirements of the Redlands Municipal Code.
- (3) Large family day-care home, serving seven to twelve children.
- (4) Day care centers for thirteen or more children.
- (5) Second units ("granny flats") as defined and regulated by the Redlands Municipal Code.

- (6) Board and care homes for more than six residents.
- (7) Adult day care facilities.
- (8) Churches and other institutions facilitating worship.
- (9) Public utilities and public service uses or structures including, but not limited to, reservoirs, pumping plants, electrical substations, central communication office, but not including any of the following: microwave and repeater huts and towers, satellite receiving stations, and cellular telephone antennae.

Section EV3.0315 Prohibited Land Uses

Any use not listed as permitted, conditionally permitted, or permitted as an accessory use is prohibited in the Multiple Family-3000 Residential District.

Section EV3.0320 Prohibited Building Types

- (a) Independent mobilehomes

Section EV3.0325 Development Standards

- (a) Minimum lot area shall be 8,000 square feet.
- (b) Minimum lot dimensions
 - (1) Minimum lot width shall be eighty (80) feet.
 - (2) Minimum lot depth shall be one hundred (100) feet.
- (c) Population Density

A minimum of three thousand (3,000) square feet (net) shall be allotted for each dwelling unit, not to exceed a total of ten (10) dwelling units per acre (gross).
- (d) Maximum coverage by structures shall be forty-five (45) percent of the lot area.
- (e) Maximum structure height shall be thirty-five (35) feet.

(f) Minimum building setbacks shall be as follows:

- | | | |
|-----|------------------|------------------|
| (1) | Front yard | 25 feet |
| | Street side yard | 25 feet |
| | Side yard | 5 feet & 10 feet |
| | Rear yard | 15 feet |
- (2) Where front or side street is designated as a Special Landscaped Street in Section EV4.0115 (a), see Section EV4.0115 for setback and landscaping requirements.
- (3) Where side or rear yard abuts a commercial or industrial district, dwelling unit(s) shall be set back at least twenty-five (25) feet from property line.
- (4) For permitted projections into yards, see zoning code of governing jurisdiction.

(g) Interior yards and courts for grouped dwellings

For purposes of this part, the front of a building shall be considered the side containing the main entryway. (This provision may result in buildings with multiple front yards.)

- (1) Single family dwellings:
- (A) Where two (2) or more single family detached dwellings are located on a lot, there shall be not less than twenty (20) feet between dwellings arranged side to side; not less than forty (40) feet between dwellings arranged front to rear; not less than thirty (30) feet between dwellings arranged rear to side; front yards facing a side property line shall be not less than fifteen (15) feet; side yards facing a rear property line shall be not less than fifteen (15) feet; rear yards facing a side property line may be five (5) feet.
- (B) Where a driveway is included in the space between buildings, the total space between buildings or required yards shall be increased by the width of the driveway.
- (C) Main buildings and/or accessory buildings shall in no instance be closer than ten (10) feet.

(2) Multiple family dwellings containing more than two units:

- (A) Where there is more than one main building on a lot or building site, or where a building is constructed about a court, each building or wing shall have the following yards:

	<u>Front</u>	<u>Side</u>	<u>Rear</u>
For one story buildings	25'	15'	20'
For two story buildings	30'	15'	20'

For buildings having offset surfaces, each yard standard may be reduced up to five (5) feet provided the average required space between buildings is maintained.

For buildings placed at an angle with each other each yard standard may be reduced up to ten (10) feet provided that the average required space between buildings is maintained except that main buildings shall be no closer than twenty (20) feet at the closest point and main buildings and accessory buildings shall be no closer than fifteen (15) feet at the closest point.

The yard standards of this subsection may be modified by the Planning Commission of the governing jurisdiction where it can clearly be demonstrated that the modification(s) will improve the project in terms of more usable open space, aesthetic appearance and living environment except that no main buildings or main building and accessory building shall be closer than twenty (20) feet.

- (B) Where a driveway is included in the space between buildings, the total distance between buildings shall be increased by the width of the driveway, except as follows:
- (i) Where a driveway is included in the space between buildings arranged rear to rear that have garages incorporated into the dwelling units, the total distance between buildings shall be not less than thirty (30) feet and the side of the building opposite the driveway shall be considered the front of the building.

- (ii) Where a driveway is included in the space between buildings arranged rear to side that have garages incorporated into the dwelling units, the total distance between buildings shall be not less than the width of the driveway plus the required side yard and the side of the building opposite the driveway shall be considered the front of the building.
- (iii) The distance between buildings or wings shall not be less than the sum of the yard requirements for each building or wing as set forth herein. Main buildings and accessory buildings shall in no instance be closer than fifteen (15) feet, except that the front yard of any main building facing a garage or carport shall be a minimum of forty (40) feet.
- (iv) No individual main building shall exceed a linear dimension of 150 feet. In addition, the continuous surface of a main building paralleling a public right-of-way shall not exceed a linear dimension of fifty (50) feet.

(h) Outdoor Living Space

Outdoor living space for relaxation, recreation, and visual pleasure shall be provided for each dwelling unit at a standard of one square foot of outdoor living area for each three square feet of gross floor area within each dwelling unit.

- (1) The outdoor living space may be provided in the form of common open space areas, private open space areas, or a combination thereof, except that there shall be at least 200 square feet of common open space for each dwelling unit. Said spaces shall be provided in accordance with the following specifications:

- (A) Common Outdoor Living Space

Each common outdoor living space shall contain a minimum area of 2000 square feet and have a minimum dimension of 20 feet.

- (i) Pools, putting greens, shuffleboard courts and similar open type recreational facilities may be located in the common outdoor living space.
 - (ii) Recreation buildings may be located within the common outdoor living space; provided, however, that not more than ten (10) percent of said space may be utilized for recreational building purposes. The space between buildings shall be increased by the dimensions of the recreational building(s).
 - (iii) A minimum of thirty (30) percent of the common open space area shall be landscaped and maintained.
- (B) Private Outdoor Living Space
 - (i) Private outdoor living space for dwelling units located on the ground floor shall contain a minimum area of 150 square feet with a minimum dimension of ten (10) feet. Said space shall be contiguous to the unit served.
 - (ii) All patios, balconies and recessed areas adjacent to a public right-of-way shall be enclosed at a height of at least three (3) feet on all sides viewable from said public right-of-way. No patio enclosure over three (3) feet in height may extend into the required front yard.
- (2) Outdoor living spaces may be located in the required rear yards, side yards, and interior yards provided they comply with the minimum dimensions specified for each type of outdoor living space. The required front setback area may not be included in the calculations.
- (3) No portion of off-street parking spaces, driveways, covered pedestrian accessways or utility areas such as drying yards or trash areas shall be included in the outdoor living space calculations.
- (4) All required outdoor living spaces shall be accessible to the occupants of the dwelling units.

(i) Trash Storage Area

A trash storage and pickup area of adequate size shall be provided to the rear of the required front yard. Said area shall be completely enclosed and screened from view by solid masonry walls.

(j) Accessory Buildings

Accessory buildings may occupy not more than eighty (80) percent of the rear yard area.

(k) Off-Street Parking

The provisions of Section EV4.0201 (a) shall apply. In addition, there shall be not more than one driveway to off-street parking and covered parking areas for each 100 feet of lot width.

Whenever a driveway or open parking spaces are located within a side yard or rear yard, a planting area with not less than a three (3) foot wide interior diameter shall be provided adjacent to the interior property line(s).

(l) Parking Screening

All open parking spaces when adjacent to a public right-of-way shall be screened from public view as required in Section] V4. 0250.

All covered parking spaces shall have solid walls extending from the ground to roof along the end adjacent to a public right-of-way and shall be fully enclosed on all sides with walls and doors for at least the first seventy-five (75) feet of lot depth. In addition, entryways to covered parking spaces that are viewable from a public right-of-way shall be enclosed by doors.

Structures having roofs and exterior walls comprised of sheet metal shall not be located closer than 100 feet from any dedicated street and shall not be viewable from any public right-of-way.

(m) Fences, Landscaping, Walls and Signs

The provisions of Division 4 shall apply.

(n) Mechanical Equipment

All heating, ventilating and air conditioning equipment, including ducts, meters, plumbing lines and tanks, shall be architecturally screened from public view. Mechanical and plumbing equipment shall be screened from view as follows:

- (1) By masonry walls when mounted at grade;
- (2) By parapet walls on flat roofs;
- (3) By parapet walls or in roof wells on pitched roofs.

Plumbing vent pipes, all heater flues, and all roof penetrations shall be gathered and concealed from view as required in (2) and (3).

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CHAPTER 4. MULTIPLE FAMILY RESIDENTIAL—2500 DISTRICT**Section EV3.0401 Intent**

The Multiple Family Residential—2500 District is intended to provide for the development of high quality apartments on large lots. This district provides for higher dwelling unit density, up to a maximum of fifteen (15) dwelling units per acre. Except that in the County unincorporated area the maximum dwelling unit density shall not exceed fourteen (14) dwelling units per acre.

Section EV3.0405 Locational Standards

- (a) The area is substantially occupied or will be occupied by multiple family dwellings at a density not to exceed fifteen (15) dwelling units per acre. Except that in the County unincorporated area the maximum dwelling unit density shall not exceed fourteen (14) dwelling units per acre.
- (b) The area is served by appropriate public facilities, including recreation and neighborhood shopping facilities, and by major streets, generally located on the periphery of the neighborhood.
- (c) The area is free from environmental hazards that would significantly impact residential development.
- (d) There is a commitment to provide a full range of urban services to the area, including water, sewers, street systems, flood control, fire, police, schools, parks, libraries and medical facilities.
- (e) The location shall be consistent with the General Plan text and maps.

Section EV3.0410 Permitted Land Uses

The following uses are permitted within the Multiple Family-2500 Residential District. New construction shall require Commission Review and Approval as required by the Redlands Municipal Code.

- (1) Agriculture as a continuation of the existing land use, including orchards, groves, nurseries, field crops, berry crops, bush crops, truck gardening and commercial flower growing and all necessary structures and appurtenances thereof.

- (2) Multiple family dwellings either in one (1) structure or a group of structures. No groups of single family detached dwelling units may be placed on any lot or parcel of land.

Section EV3.0412 Accessory Land Uses

The following uses are permitted as an accessory use to a primary permitted or conditionally permitted use. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b):

- (1) Accessory building such as a bath house, cabana, and storage shed.
- (2) Garage or carport
- (3) Private or Public swimming pool, as defined by the Uniform Building Code.
- (4) Recreational facilities intended for use by the residents of a residential development and their guests, including playgrounds, tennis courts and athletic fields.

Section EV3.0413 Conditionally Permitted Uses

The following uses may be permitted subject to approval of a Conditional Use Permit. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b):

- (1) Recreational facilities, including playgrounds, tennis courts and athletic fields not intended for use primarily by residents of a residential development and their guests.
- (2) Large family day-care home, serving seven to twelve children.
- (3) Day care centers for thirteen or more children.
- (4) Mobilehome parks, subject to the requirements of the Redlands Municipal Code.
- (5) Second units ("granny flats") as defined and regulated by the Redlands Municipal Code.
- (6) Churches and other institutions facilitating worship.

- (7) Public utilities and public service uses or structures including, but not limited to, reservoirs, pumping plants, electrical substations, central communication office, but not including any of the following: microwave and repeater huts and towers, satellite receiving stations, and cellular telephone antennae.

Section EV3.0415 Prohibited Land Uses

Any use not listed as permitted, conditionally permitted, or permitted as an accessory use is prohibited in the Multiple Family-2500 Residential District.

Section EV3.0420 Prohibited Building Types

- (a) Independent mobilehomes
- (b) Mobilehome parks

Section EV3.0425 Development Standards

- (a) Minimum lot area shall be twelve thousand (12,000) feet.
- (b) Minimum lot dimensions
 - (1) Minimum lot width shall be one hundred (100) feet
 - (2) Minimum lot depth shall be one hundred twenty (120) feet.
- (c) Population Density

A minimum of two thousand five hundred (2500) square feet (net) shall be allotted for each dwelling unit, not to exceed a total of fifteen (15) dwelling units per acre (gross).
- (d) Maximum coverage by structures shall be forty-five (45) percent of the lot area.
- (e) Buildings and structures shall have a height not greater than three (3) stories.

(f) Minimum building setbacks shall be as follows:

(1)	Front yard	25 feet (35 feet for 3-story building)
	Street side yard	25 feet (35 feet for 3-story building)
	Side yard	10 feet (add 5 feet for each story above first)
	Rear yard	25 feet

(2) Where front or side street is designated as a Special Landscaped Street in Section EV4.0115 (a), see Section EV4.0115 for setback and landscaping requirements.

(3) Where side or rear yard abuts a commercial or industrial district, dwelling unit(s) shall be set back at least twenty-five (25) feet from property line.

(4) For permitted projections into yards, see zoning code of governing jurisdiction.

(g) Interior yards and courts for grouped dwellings

See Section EV3.0325 (g)

(h) Outdoor living space

See Section EV3.0325 (h)

(i) Trash Storage Area

A trash storage and pickup area of adequate size shall be provided to the rear of the required front yard. said area shall be completely enclosed and screened from view by solid masonry walls.

(j) Accessory Buildings

Accessory buildings may occupy not more than eighty (80) percent of the rear yard area.

(k) Off-Street Parking

The provisions of Section EV4.0201 (a) shall apply. In addition, there shall be not more than one driveway to off-street parking and covered parking areas for each 100 fee of lot width.

Whenever a driveway or open parking spaces are located within a side yard or rear yard, a planting area with not less than a three (3) foot wide interior diameter shall be provided adjacent to the interior property line(s).

(l) Parking Screening

All open parking spaces when adjacent to a public right-of-way shall be screened from public view as required in Section EV4. 0250.

All covered parking spaces shall have solid walls extending from the ground to roof along the end adjacent to a public right-of-way and shall be fully enclosed on all sides with walls and doors for at least the first seventy-five (75) feet of lot depth. In addition, entryways to covered parking spaces that are viewable from a public right-of-way shall be enclosed by doors.

Structures having roofs and exterior walls comprised of sheet metal shall not be located closer than 100 feet from any dedicated street and shall not be viewable from any public right-of-way.

(m) Fences, Landscaping, Walls and Signs

The provisions of Division 4 shall apply.

(n) Mechanical Equipment

All heating, ventilating and air conditioning equipment, including ducts, meters, plumbing lines and tanks, shall be architecturally screened from public view. Mechanical and plumbing equipment shall be screened from view as follows:

- (1) By masonry walls when mounted at grade;
- (2) By parapet walls on flat roofs;
- (3) By parapet walls or in roof wells on pitched roofs.

Plumbing vent pipes, all heater flues, and all roof penetrations shall be gathered and concealed from view as required in (2) and (3).

(o) Existing Structures

Before a building permit may be issued, all existing single-family buildings and related structures shall be removed from the property.

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CHAPTER 5. ADMINISTRATIVE PROFESSIONAL DISTRICT

Section EV3.0501 Intent

The Administrative Professional District creates, preserves and enhances areas for businesses and professions which provide services primarily from offices and maintain no stock of goods for retail trade. This district provides an opportunity for the grouping of businesses, professions and other services having related and compatible functions. The number of consumer visits would be less frequent and traffic generation more moderate than for retail commercial uses. This district is also intended to provide a transition or buffer between more intensive retail and service centers and residential land uses or between major arterials and adjacent residential neighborhoods.

Section EV3.0505 Locational Standards

- (a) The area is substantially occupied and will be occupied by a relatively contiguous grouping of service establishments which conduct their operations in offices.
- (b) The District is located on the edge of a more intensive commercial district, along major streets, or between highways and adjacent residential uses, with proper consideration given to parking, landscaping and general amenities of adjoining uses.
- (c) The location shall be consistent with the General Plan text and maps.

Section EV3.0510 Permitted Land Uses

The following uses are permitted within the Administrative Professional District. New construction shall require Commission Review and Approval as established in the Redlands Municipal Code. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b).

- (1) Agriculture as a continuation of the existing land use, including orchards, groves, nurseries, field crops, tree crops, berry crops, bush crops, truck gardening and commercial flower growing, and all necessary structures and appurtenances thereof.
- (2) Professional Services, similar but not limited to the following types of uses:
 - Accounting, auditing, bookkeeping
 - Counseling (marriage and family)

- Engineering, architectural and planning
 - Legal services
 - Medical and dental laboratories
 - Physicians, surgeons, chiropractors, osteopathic physicians, dentists, oral surgeons, orthodontists,
 - Prescription pharmacy and optical services
- (3) Business Services, similar but not limited to the following types of uses:
- Advertisement, business and management
 - Consulting
 - Detective and protective services
 - Stenographic, secretarial, clerical and mailing
 - Collection agencies
 - Blueprinting and photocopy
 - Employment agencies
- (4) Financial Services, similar but not limited to the following types of uses:
- Banks, savings and loans, and credit unions
 - Commodity services
 - Holding and investment services
 - Insurance carriers, agents, brokers
 - Real estate agents and brokers
 - Real estate developers and builders (office only)
 - Title abstracting
- (5) Miscellaneous Services, similar but not limited to the following types of uses:
- Business associations
 - Civic, social and fraternal associations
 - Live theaters (except adult theaters as defined by the Redlands Municipal Code)
 - Libraries and reading rooms
 - Museums and galleries
 - Private adoption agencies
 - Professional membership organizations
 - Welfare and charitable services

Section EV3.0513 Conditionally Permitted Uses

The following uses may be permitted subject to approval of a Conditional Use Permit. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b):

- (1) Day care centers for thirteen or more children.
- (2) Churches and other institutions facilitating worship.
- (3) Public utilities and public service uses or structures including, but not limited to, reservoirs, pumping plants, electrical substations, central communication office, microwave and repeater huts and towers, and satellite receiving stations.
- (4) Hospitals.

Section EV3.0515 Prohibited Uses

Any use not listed as permitted, conditionally permitted, or permitted as an accessory use is prohibited in the Administrative Professional District.

Section EV3.0520 Development Standards

- (a) Minimum lot area shall be ten thousand (10,000) square feet.
- (b) Minimum parcel width shall be eighty (80) feet and minimum parcel depth shall be one hundred twenty (120) feet.
- (c) Maximum structure height shall be thirty-five (35) feet.
- (d) Maximum building coverage shall be sixty (60) percent.
- (e) Minimum building setbacks shall be as follows:
 - (1)

Front yard	25 feet
Street side yard	25 feet
Side and rear yards	5 feet (except where adjoining residential district)
 - (2) Where front or side street is designated as a Special Landscaped Street in Section EV4.0115 (a), see Section EV4.0115 for setback and landscaping requirements.

- (3) Where parcel abuts a residential district, see Section EV4.0225 (c) for setback and landscape buffer requirements.
- (f) For requirements on parking, landscaping, access, loading, storage, signs, and other design standards, the provisions of Division 4 shall apply.

CHAPTER 6. NEIGHBORHOOD COMMERCIAL**Section EV3.0601 Intent**

The Neighborhood Commercial District creates, preserves and enhances areas for convenience shopping, where residents can purchase daily or frequently used necessities, household goods and personal services, in relative proximity to place of residence. Commercial establishments in this District include food stores, drugstores, and small specialty stores. Some business and government offices may be appropriate where these uses would either serve the surrounding residential neighborhood or would generate a limited amount of traffic. The Neighborhood Commercial District should be located and designed so as to be compatible with adjacent residential neighborhoods.

Section EV3.0605 Locational Standards

- (a) The area consists or will consist of a compact group of stores or offices which provide convenience goods and personal services households in nearby neighborhoods.
- (b) The district is located on an arterial street at the periphery of a neighborhood, or at an intersection which carries substantial neighborhood traffic.
- (c) The area can physically accommodate shopping and service facilities and all required parking, loading, circulation and landscape requirements.
- (d) No Neighborhood Commercial District shall be located closer than one (1) mile from any other shopping area or Neighborhood Commercial District.
- (e) The location shall be consistent with the General Plan text and maps.

Section EV3.0610 Permitted Land Uses

The following uses are permitted within the Neighborhood Commercial District. New construction shall require Commission Review and Approval as established in the Redlands Municipal Code. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b).

- (1) Agriculture as a continuation of the existing land use, including orchards, groves, nurseries, field crops, tree crops, berry crops, bush crops, truck gardening and commercial flower growing, and all necessary structures and appurtenances thereof.

- (2) Uses permitted in the Administrative/ Professional District.
- (3) Retail sale of goods generally characterized by relatively short-term utility or consumption, typified by, but not limited to, the sale of the following types of consumer goods and types of retail stores:
- Apparel
 - Auto parts (new retail)
 - Bakeries
 - Books (general, not adult-oriented as defined by the Redlands Municipal Code)
 - Computer hardware and software and peripherals
 - Confectioneries and ice cream
 - Convenience markets
 - Cosmetics and accessories
 - Dishes, china, glassware, metalware
 - Dry goods and notions
 - Drug stores and pharmacies
 - Five and ten variety stores
 - Florist
 - Food caterers and delicatessens
 - Gift shop
 - Groceries
 - Hardware (excluding "warehouse"-type hardware stores and outlets)
 - Hobby and yarn shops
 - Interior decorating supplies
 - Lawn and garden equipment and supplies
 - Meat, fish, seafood
 - Newspapers and magazines
 - Paint, varnish, lacquer
 - Pets
 - Records, tapes, videotapes, compact discs, video discs
 - Shoes
 - Stationary and art supplies
 - Toys, sport and athletic goods
- (4) Provision of services which are typically needed frequently or recurrently and which primarily care for the needs of individuals and households rather than businesses. Uses in this category are typified by, but are not limited to, the following:
- Apparel repair, alterations and tailoring
 - Beauty salons and barber shops

- Bicycle repair
 - Computer service and repair
 - Laundering and dry-cleaning outlets
 - Locksmith
 - Photographic studios and processors
 - Radio, TV and stereo repair
 - Repair and service of any article whose sale is permitted in this District
 - Self-service laundries
 - Shoe repair
 - Small appliance repair
 - Suntan parlors
 - Watch, clock and jewelry repair
 - Videotape/Video disk rental and sales
- (5) Restaurants, except those serving alcoholic beverages and drive-through restaurants, which require a Conditional Use Permit.

Section EV3.0613 Conditionally Permitted Uses

The following uses may be permitted subject to approval of a Conditional Use Permit by the Planning Commission. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b):

- (1) Automobile service stations, subject to the requirements shown in Section EV3.0620(h) of this document.
- (2) Drive-through restaurants and services, subject to the requirements and standards shown in Section EV3.0620(i) of this Specific Plan. Due to the high traffic generation characteristics of drive-through restaurant facilities such uses shall not be located closer than 300 feet from each other, measured from the property lines of the pads on which the restaurants are located.
- (3) Family recreation centers consisting of amusement machine arcades, billiard rooms, or other similar entertainment.
- (4) Liquor stores, or any retail store at which the display of alcoholic beverages occupies more than thirty three percent (33%) of the total linear shelf space within the store.
- (5) Teen Centers.

- (6) Restaurants at which on-site alcoholic beverage sales takes place.
- (7) Conditionally permitted uses in the Administrative Professional District.

Section EV3.0615 Prohibited Uses

Any use not listed as permitted, conditionally permitted, or permitted as an accessory use is prohibited in the Neighborhood Commercial District.

Section EV3.0620 Development Standards

- (a) Maximum lot area shall be twenty thousand (20,000) square feet.
- (b) Minimum parcel width shall be one hundred twenty (120) feet and minimum parcel depth shall be one hundred twenty (120) feet.
- (c) Maximum structure height shall be not more than two stories or thirty-five (35) feet.
- (d) Maximum building coverage shall be fifty (50) percent.
- (e) Minimum building setbacks shall be as follows:
 - (1)

Front yard	25 feet
Street side yard	25 feet
Side and rear yards	5 feet (except where adjoining Residential District)
 - (2) Where front or side street is designated as a Special Landscaped Street in Section EV4.0115 (a), see Section EV4.0115 for setback and landscaping requirements.
 - (3) Where parcel abuts a residential district, see Section EV4.0225 (c) for setback and landscape buffer requirements.
- (f) For requirements on parking, landscaping, loading, lighting, storage, signs, and other design standards, the provisions of Division 4 shall apply.
- (g) Accessways

All accessways to a public street shall be located not less than seventy-five (75) feet from the intersection of any street lines, and shall be designed in a manner conducive to safe ingress and egress. Where

practical, exits shall be located on a minor street. Frequency of accessways shall be at intervals of not less than one hundred (100) feet.

(h) Requirements and Standards for Automobile Service Stations

The following standards shall apply to automobile service stations, gas stations, filling stations, and similar uses:

- (1) The minimum lot area for a service station shall be twenty thousand (20,000) square feet.
- (2) Minimum lot width and depth shall be one hundred twenty (120) feet.
- (3) No more than half of the corners at any one intersection shall be occupied by service stations.
- (4) Off-street parking shall be provided in accordance with the provisions of Section EV4.0201 and the following standards:
 - No outdoor parking or storage of wrecked, dismantled, or inoperative vehicles shall be permitted.
 - Parked vehicles shall be limited to those directly associated with the business or awaiting service.
 - No parking shall be permitted in the corner cut-off area.
 - Parking areas shall be screened as required under landscaping section of Division 4 of this Specific Plan.
- (5) Service stations shall comply with the following landscaping standards and requirements:
 - Except for driveway openings there shall be a landscaped planter area not less than five (5) feet in width extending along the entire street frontage.
 - A minimum of twenty (20) percent of the entire lot area shall be landscaped.
 - All planter areas shall be enclosed by six (6) inch high concrete curbs. The width of these curbs shall be included in the measurement of the overall width of the planter area.
 - A detailed landscaping plan indicating types and distribution of plantings shall be provided with the application.

- The Planning Commission may require the installation of walls in various locations as appropriate to screen views of on-site uses and/or buffer the service station from adjacent uses.
 - All trash, refuse, and used merchandise shall be stored in an area enclosed by solid walls or fences. Trash and refuse areas shall be located on the rear portion of the lot.
- (6) Customer pump areas shall be roofed, and shall comply with the following standards and requirements:
- The roofs over the pump areas at all newly constructed service stations (including those constructed to replace an existing station) shall connect to the station or station roof forming one continuous roofed structure.
- (7) All utilities on the site for direct service to a service station shall be installed underground.
- (8) Lighting on the exterior and interior of the structure shall be shielded from horizontal view except for sign lights or those especially designed for illumination of the parking lot.
- (9) Equipment Rentals at automobile service stations shall comply with the following requirements and standards:
- The outside storage of rental trailers, and similar equipment, may be permitted provided they are completely screened from public view and the use is specifically authorized in the Conditional Use Permit for the service station.
 - Additional lot area over the required minimum in the amount of 200 square feet per rental unit shall be provided.

(i) Drive-Through Restaurants and Services

The following standards shall apply to all restaurants and services which provide service to patrons while they are in their vehicle:

- (1) Minimum lot area shall be twenty thousand (20,000) square feet.
- (2) Minimum lot width and depth dimensions shall be one hundred twenty (120) feet.

- (3) Off-street parking shall be provided in accordance with the provisions of Section EV4.0201 of this Specific Plan.
- (4) Landscaping for drive-through uses shall comply with the following requirements and standards:
 - (A) Except for driveway openings there shall be a landscaped planter area not less than ten (10) feet in width extending along the entire street frontage and not less than (5) feet in width along all interior property lines.
 - (B) A minimum of twenty percent (20%) of the total site of the drive-through use shall be landscaped.
 - (C) Landscaping guidelines and requirements of Division 4 of this Specific Plan shall apply. Where this section applies a stricter landscaping standard, this section's requirements shall supersede the standard in Division 4.
- (5) Drive-through aisles shall be completely screened from the view of public rights-of-way to a height equal to or greater than that of standard vehicular headlights. Screening shall be by use of walls, earth berms, landscaping or a combination thereof.
- (6) A traffic study prepared by a qualified traffic engineer shall be submitted with the application.

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CHAPTER 7. GENERAL COMMERCIAL

Section EV3.0701 Intent

The General Commercial District creates, preserves and enhances areas for businesses which provide a variety of goods and services serving a community or regional market. The District provides for the grouping of retail and service uses that are compatible in the type of commodity sold, the scope of services provided or the method of operation.

The District may contain major department stores, administrative/ professional headquarters and community or regional shopping centers. Smaller businesses which benefit from the customer drawing power of the larger stores and provide specialty goods and services may also be located here. The creation of a pleasant and efficient environment for shopping and business is the primary function of this District.

Section EV3.0705 Locational Standards

- (a) The area is occupied or will be occupied by stores and businesses which provide retail sales and services for a wide range of consumer needs, characterized by relatively long-term utility.
- (b) The District is located either at the intersection of major streets or along major streets and freeways.
- (c) The area is free of environmental constraints and has physical conditions which can sustain commercial development, including all required parking, circulation, landscaping and yards.
- (d) The location shall be consistent with the General Plan text and maps.

Section EV3.0710 Permitted Land Uses

The following uses are permitted within the General Commercial District. New construction shall require Commission Review and Approval as required by the Redlands Municipal Code. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b).

- (1) Agriculture as a continuation of the existing land use, including orchards, groves, nurseries, field crops, tree crops, berry crops, bush crops, truck gardening and commercial flower growing, and structures and appurtenances thereof.

- (2) Uses permitted in the Neighborhood Commercial District and Administrative Professional District.
- (3) Retail sale of goods generally characterized by relatively long-term utility or consumption, including but not limited to the following types of goods and/or stores:
 - Antiques
 - Appliances
 - Art galleries, print and frame shops
 - Auto and motorcycle parts and accessories (new)
 - Automobiles, motorcycles and other motor vehicles (new)
 - Bicycles and parts
 - Boats
 - Commercial nursery, retail
 - Computers and accessories
 - Department and general merchandise stores
 - Draperies, curtains, upholstery
 - Fur goods and apparel
 - Furniture and home furnishings
 - Home improvement centers
 - Jewelry, precious metals, coin and stamp dealers
 - Office supplies and equipment
 - Photographic equipment and supplies
 - Plumbing and heating equipment and supplies
 - Radio, TV, stereo
 - Secondhand merchandise and thrift shops
 - Swimming pools and spas
 - Vintage or collectible vehicles
 - Wall and floor coverings
- (4) Provision of services to individuals and business establishments, generally including but not limited to the following types of services:
 - Automobile rental (limited to offices and storage of vehicles only; no on-site repair or maintenance of rental vehicles permitted)
 - Car washes
 - Eating establishments (including on-site sale of alcoholic beverages), with the exception of drive-through restaurants, which shall require a Conditional Use Permit
 - Funeral parlors and mortuaries
 - Furniture repair and reupholstery
 - Personal storage facilities (mini-warehouses)
 - Pet grooming

- Restaurants See *"Eating establishments"*
 - Taxidermy
 - Telephone exchanges
 - Veterinarians and animal hospitals
 - Vocational and trade schools
- (5) Repair and servicing of any article which is permitted to be sold in this District.

Section EV3.0712 Accessory Land Uses

The following uses are permitted as an accessory use to a primary permitted or conditionally permitted use:

- (1) Sale of used automobiles and other vehicles, if accessory to the sale of new vehicles.

Section EV3.0713 Conditionally Permitted Uses

The following uses may be permitted subject to approval of a Conditional Use Permit by the Planning Commission. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b):

- (1) "Mini storage" warehouses or spaces
- (2) Auto service and repair centers
- (3) Commercial repair garages for motor vehicles and equipment (including body and paint work)
- (4) Cultural, Entertainment and Recreational Facilities, generally including but not limited to the following:
- Arcades, pool halls, discotheques
 - Bars and cocktail lounges
 - Bowling alley and miniature golf
 - Drive-in theaters
 - Gymnasiums, health and athletic clubs, figure salons
 - Live theaters (except adult theaters as defined by the Redlands Municipal Code)

- Meeting halls (lodge and union)
 - Motion picture theaters
 - Nightclubs
 - Recreation centers
 - Skating rinks (indoor)
- (5) Hotels and Motels
- (6) Conditionally permitted uses in the Administrative Professional District and Neighborhood Commercial District.

Section EV3.0715 Prohibited Uses

Any use not listed as permitted, conditionally permitted, or permitted as an accessory use is prohibited in the General Commercial District.

Section EV3.0720 Development Standards

- (a) All lots shall have adequate width, depth and area to accommodate all required parking, setbacks, landscaping, loading, trash enclosures, and access requirements.
- (b) No maximum building height is established. Height limits shall be determined in accordance with Part 77 of the FAA regulations. Also refer to Floor Area Ratio-Section EV4.0240 (a).
- (c) Minimum building setbacks shall be as follows:
- | | | |
|-----|---------------------|--|
| (1) | Front yard | 25 feet |
| | Street side yard | 25 feet |
| | Side and rear yards | None except where adjoining residential district |
- (2) Where district abuts a street designated as a Special Landscaped Street in Section EV4.0115 (a), see Section EV4.0115 for setback and landscaping requirements.
- (3) Where district abuts a residential district or residential portion of a Planned Development, see Section EV4.0225 (d) for setback and landscape buffer requirements.
- (d) For requirements on landscaping, walls, access, parking, loading, trash enclosures, lighting and storage, the provisions of Division 4 shall apply.

- (e) The provisions of Division 4 shall apply to signs. In addition, the maximum area of any sign facing a residential district shall be 75 feet.
- (f) All accessways to a public street shall be located not less than seventy-five (75) feet from the intersection of any street lines, and shall be designed in a manner conducive to safe ingress and egress. Where practical, exits shall be located on a minor street. Frequency of accessways shall be at intervals of not less than one hundred (100) feet.

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CHAPTER 8. REGIONAL COMMERCIAL DISTRICT

Section EV3.0801 Intent

The Regional Commercial District is intended to create and preserve an area for development as a regional center, containing major retail outlets, office complexes, hotels and motels, entertainment centers, and secondary commercial and service uses. Because of the intensity and diversity of permitted uses, all parcels within this district shall be developed in accordance with a site plan proposed for the entire District. Innovation and variety of design will be encouraged in development of this District. Emphasis will also be placed upon pedestrian vehicular circulation facilities within and adjacent to the District, due to the anticipated high volume of traffic which will be generated in the District.

Section EV3.0805 Locational Standards

- (a) The area is occupied or will be occupied by stores and businesses which provide retail sales and services for a wide range of consumer needs, characterized by relatively long-term utility or a regional service area.
- (b) The District is located at the intersection of major streets and has access by freeway.
- (c) The area is free from environmental constraints and has physical conditions which can sustain commercial development, including all required parking, circulation, landscaping and yards.
- (d) The location shall be consistent with the General Plan text and maps.

Section EV3.0810 Permitted Land Uses

The following uses are permitted within the Regional Commercial District. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b).

Prior to any development within this District, a Planned Development application as defined and provided for in Division 1, shall be submitted over all parcels within the Regional Commercial District, with each phase subject to final approval prior to issuance of permits.

- (1) Agriculture as a continuation of the existing land use, including orchards, groves, nurseries, field crops, tree crops, berry crops, bush crops, truck gardening and commercial flower growing, and all necessary structures and appurtenances.
- (2) Uses permitted in the Neighborhood Commercial District, Administrative Professional District, and General Commercial District.
- (3) Hotels
- (4) Conference and convention centers
- (5) Stadiums and amphitheaters
- (6) Regional mall (individual uses within a mall or constructed as part of a mall project may require a Conditional Use Permit if required by this Specific Plan).

Section EV3.0812 Accessory Land Uses

The following uses are permitted as an accessory use to a primary permitted or conditionally permitted use:

- (1) Storage of merchandise or products for retail sale on the premises.
- (2) Parking structures.

Section EV3.0813 Conditionally Permitted Uses

The following uses may be permitted subject to approval of a Conditional Use Permit by the Planning Commission. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b).

- (1) Conditionally permitted uses in the Administrative Professional District, Neighborhood Commercial District, and General Commercial District.

Section EV3.0815 Prohibited Uses

Any use not listed as permitted, conditionally permitted, or permitted as an accessory use is prohibited in the Regional Commercial District.

Section EV3.0820 Development Standards

- (a) All lots shall have adequate width, depth and area to accommodate all required parking, setbacks, landscaping, loading, trash enclosures, and access requirements.
- (b) No maximum building height is established. Height limits shall be determined in accordance with Part 77 of the FAA regulations. Also refer to Floor Area Ratio-Section EV4.0240 (a).
- (c) Minimum building setbacks shall be as follows:
 - (1)

Front yard	25 feet
Street side yard	25 feet
Side and rear yards	None except where adjoining residential district
 - (2) Where district abuts a street designated as a Special Landscaped Street in Section EV4.0115 (a), see Section EV4.0115 for setback and landscaping requirements.
 - (3) Where district abuts a residential district or residential portion of a Planned Development, see Section EV4.0225 (d) for setback and landscape buffer requirements.

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CHAPTER 9. COMMERCIAL INDUSTRIAL DISTRICT

Section EV3.0901 Intent

The Commercial Industrial District is intended for uses which serve a regional area with a wide variety of wholesale, retail and service uses. Goods and services available in this District may serve businesses located in other commercial and industrial districts, but may not be compatible with other commercial districts due to intensity of uses permitted. Some light manufacturing of a non-polluting type would also be allowed in this District. The District is located near commercial and industrial districts and major transportation routes.

Section EV3.0905 Locational Standards

- (a) The area is occupied or will be occupied by stores and businesses which sell at retail or wholesale a variety of goods and services serving a regional market, and other compatible activities such as light manufacturing.
- (b) The area is located in proximity to commercial, industrial or agricultural districts which are served by the commodities and services offered in this District.
- (c) The District is located either at the intersection of or adjacent to major streets and freeways, or served by railroad access, and has access to existing or planned public services and facilities.
- (d) The area is free of environmental constraints and has physical conditions which can sustain commercial and light industrial development, including all required parking, circulation, landscaping and yards.
- (e) The location shall be consistent with the General Plan text and maps.

Section EV3.0910 Permitted Land Uses

The following uses are permitted within the Commercial Industrial District. New construction shall require Commission Review and Approval as established in the Redlands Municipal Code. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b).

- (1) Agriculture as a continuation of the existing land use, including orchards, groves, nurseries, field crops, tree crops, berry crops, bush crops, truck gardening and commercial flower growing, and all necessary structures and appurtenances thereof.
- (2) Uses permitted and as regulated in the Administrative/ Professional District.
- (3) Research and Development Research laboratories, product development facilities, and testing laboratories and facilities, typified by, but not limited to facilities for products or processes which typically do not involve the potential for producing odors, air pollutant emissions, or other potential impacts on adjoining properties or public infrastructure:
 - Electrical
 - Film and photographic
 - Mechanical
 - Medical and dental
 - Metallurgical
 - Optical
 - Pharmaceutical
 - X-Ray
- (4) Establishments primarily engaged in manufacturing which takes place entirely within an enclosed building with no external emissions or other indication of the processes taking place in the building. Other products may also be manufactured within enclosed buildings. Uses which produce external emissions shall require a Conditional Use Permit, per Section EV3.0913. The following are typical of the products which can be manufactured in this manner.
 - Apparel, drapery, upholstery, millinery, and related cloth and clothing items
 - Fabricated metal products, including heating and air conditioning equipment, communication equipment, electrical equipment, plumbing fixtures, radio and
 - Furniture and fixtures, including office furniture, store fixtures, blinds and shades, furniture, shelving
 - Miscellaneous manufactured goods, including jewelry, lapidary, precious metals, toys, sporting goods, umbrellas, brushes, novelties, notions, silverware, pictures and frames, musical instruments, tobacco products, artist supplies and similar goods

- Professional and scientific goods, including measuring instruments, clocks and watches, optical goods, surgical and medical instruments, photographic equipment, engineering, scientific and research instruments, computers, orthopedic, prosthetic and surgical appliances, ophthalmic goods, and similar equipment and supplies
 - Publishing, including newspapers, business forms, typesetting, photoengraving, bookbinding, printing
 - TV equipment, appliances, wiring, cutlery and hand tools, fasteners, and similar equipment and supplies
- (5) Retail sales as permitted in the General Commercial District.
- (6) Provision of services to individuals and businesses, typified by but not limited to the following types of services:
- Animal hospitals
 - Auto rental
 - Business and research offices related to the administration and operation of the permitted industrial uses
 - Equipment rental
 - Furniture upholstery
 - Hotels
 - Ice manufacture, cold storage and frozen food lockers
 - Mail order houses
 - Off-street parking
 - Parcel delivery
 - Pest control
 - Printing, lithographing, publishing
 - Public scales
 - Public utility offices and service yards
 - Radio and television broadcasting studios
 - Repair of any item permitted to be sold in this district
 - Restaurants, cafes, and cafeterias
 - Restaurants operated for employees on the premises
 - Sign painting
 - Trade union halls
 - Van and storage, including mini-warehouse facilities
- (7) Other uses typically associated with light manufacturing within enclosed buildings, including but not limited to the following:
- Business, technical, trade or professional schools
 - Clubs, lodges and similar organizations

- Government buildings
- Warehouses and distribution centers
- Wholesale trade of most consumer items, including motor vehicles, drugs, dry goods, apparel, groceries, building materials and paper products.

Section EV3.0913 Conditionally Permitted Uses

The following uses may be permitted subject to approval of a Conditional Use Permit by the Planning Commission. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b).

- (1) Conditionally permitted uses in the Administrative Professional District, Neighborhood Commercial District, General Commercial District, and Regional Commercial District.
- (2) Bowling lanes, skating rinks, sports arenas
- (3) Cocktail lounges and bars
- (4) Laboratories, product development facilities, testing laboratories and manufacturing facilities typified by, but not limited to, facilities for products or processes which may involve the potential for producing odors, air pollutant emissions, or other potential impacts on adjoining properties or public infrastructure, including but not limited to the following products or processes:
 - Biochemical
 - Chemical
 - Chemicals, including pharmaceutical, botanical, soaps and detergents, chemical fertilizer, perfumes and cosmetics, candles and wax
 - Fabricated plastic products
 - Paper products, including envelopes, bags, wallpaper, containers, pressed and molded pulp goods
 - Stone, clay and glass products, including plate glass, mirrors, dishes and earthenware, pottery, porcelain and china, fixtures and supplies, cut stone
- (5) Service uses which typically involve activities which could create noise or other nuisances affecting adjacent or surrounding properties. Uses in this category are typified by, but not limited to:

- Ambulance services
- Auto services, including repair of brakes, glass, mufflers and body work, provided no open service bays are visible from the public right-of-way
- Bus terminals and similar transit facilities
- Cleaning and dyeing plants, laundries, linen and towel service
- Retreading of tires

(6) Hotels

Section EV3.0915 Prohibited Uses

Any use not listed as permitted, conditionally permitted, or permitted as an accessory use is prohibited in the Commercial Industrial District.

Section EV3.0920 Development Standards

- (a) Minimum lot area shall be twenty thousand (20,000) square feet. The requirement shall not be construed to prevent condominium-type developments which have smaller lot sizes as long as they have a mandatory owners association, and the land area under the jurisdiction of the association meets the minimum lot size requirements.
- (b) Minimum parcel width shall be one hundred (100) feet, and minimum parcel depth shall be one hundred fifty (150) feet.
- (c) Buildings and structures shall have a height not greater than fifty (50) feet.
- (d) Lot area coverage by buildings or structures shall not exceed fifty (50%) percent of the total lot area.
- (e) Minimum building setback lines shall be as follows:
 - (1)

Front yard	25 feet
Street side yard	25 feet
Interior side yard	None required except adjacent to
Rear yard	residential district
 - (2) Where district abuts a street designated as a Special Landscaped Street in Section EV4.0115 (a), see Section EV4.0115 for setback and landscape requirements.

- (3) Where district abuts a residential district or residential portion of a Planned Development, see Section EV4.0225 (d) for setback and landscape buffer requirements.
- (f) For requirements on parking, landscaping, walls and fences, loading, lighting, storage and other design standards, the provisions of Division 4 shall apply.
- (g) All lots shall have a minimum of sixty (60) feet of access on a dedicated and improved street.
- (h) The provisions Division 4 shall apply to signs. In addition, the maximum area of any sign facing a residential zone shall be seventy-five (75) square feet.
- (i) Any structure originally designed as a residence, or as an accessory to a residence, shall not be used for any commercial or industrial purpose.
- (j) A commercial or industrial building shall not be constructed or established on the same lot together with an existing residential building.
- (k) All buildings erected, constructed or established, shall be entirely new and complete structures designed for commercial or industrial purposes only.
- (l) All uses shall be conducted within a completely enclosed building except as follows:
 - (1) Off-street parking and loading areas.
 - (2) Automobile service stations - all merchandise must be displayed within the building or under canopy cover.
 - (3) The open storage of materials, products, and equipment when such storage is enclosed by a fence, wall, buildings or other means adequate to conceal such storage from view from adjoining property or the public street. However, this requirement shall not apply to the display of products or equipment offered for sale or rental, providing said display is maintained in a neat and orderly manner.

- (m) New buildings or structures having exterior walls of sheet metal shall not be located closer than one hundred and fifty (150) feet from the property line along any Freeway, Major or Secondary Highway, or closer than one hundred (100) feet from the property line along any other dedicated street, except that said buildings or structures may be located closer to the street if any of the following conditions prevail:
 - (1) The sheet metal comprises less than twenty-five (25%) percent of the exterior wall area of said building or structures, or
 - (2) The sheet metal consists of panels with stainless steel, baked enamel or similar finish, or
 - (3) Said building or structure is concealed from view from the public street by walls, fences, landscaping, or other buildings or structures.

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CHAPTER 10. REGIONAL INDUSTRIAL

Section EV3.1001 Intent

The Regional Industrial District creates areas for light industrial and associated operations having high standards of performance. Operations are conducted primarily in enclosed buildings, with outdoor storage completely screened. The District is intended to create an environment in which industrial and allied uses may be conducted with a minimum of conflicts, and in which intrusion of residential and other non-compatible uses are prevented. Commercial and business uses which are supportive to industrial activities, or which serve daily needs of employees in the District are permitted, while general commercial uses generating high traffic volumes from commercial customers are restricted. The District is intended for high quality industrial parks or manufacturing areas producing only a small to moderate environmental impact on surrounding properties.

Section EV3.1005 Locational Standards

- (a) The area is occupied or will be occupied by manufacturing, wholesale, research and development, service storage and comparable light industrial land uses having minimal environmental impacts, or by supportive commercial uses that directly serve industrial operations and employees.
- (b) The area has rail or highway access.
- (c) There is a commitment to provide public services and utilities needed for industrial operations.
- (d) The area is free from environmental constraints, has physical conditions which can sustain industrial development, and has large parcels of land with adequate space for structures, storage, loading, parking, landscaping and setbacks.
- (e) The location shall be consistent with the General Plan text and maps.

Section EV3.1010 Permitted Land Uses

The following uses are permitted within the Regional Industrial District. New construction shall require Commission Review and Approval as established in the Redlands Municipal Code. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b).

- (1) Agriculture as a continuation of the existing land use, including orchards, groves, nurseries, field crops, tree crops, berry crops, bush crops, truck gardening and commercial flower growing, and all necessary structures and appurtenances thereof.
- (2) Research and development uses permitted in the Commercial Industrial District, as listed in Section EV3.0910 (3).
- (3) Manufacturing uses permitted in the Commercial Industrial District, as listed in Section EV3.0910 (4).
- (4) Wholesale Trade, such as:
 - Warehouse and distribution centers
 - Wholesale trade of durable and non-durable goods to commercial, industrial and professional business uses, including motor vehicles, sporting goods, electrical appliances, hardware, machinery and equipment for industry, construction, professional and service establishments
- (5) Supportive service and commercial uses, typified by but not limited to the following:
 - Business and research offices related to administration and operation of the permitted industrial uses
 - Commercial sales and service incidental to a principal permitted use
 - Electrical/electronic repair
 - Equipment rental
 - Heavy equipment repair
 - One (1) dwelling unit on the same parcel of land as a permitted use needing continual supervision, to be occupied exclusively by a superintendent or a caretaker and his family
 - Open space and recreation areas for employee use
 - Parcel delivery
 - Personal storage facilities (mini-warehouse)
 - Restaurants operated for employees on the premises
 - Truck rental and leasing
 - Welding and metal repair

Section EV3.1013 Conditionally Permitted Uses

The following uses may be permitted subject to approval of a Conditional Use Permit by the Planning Commission. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b).

- (1) Manufacturing of the following and similar products:
 - Fabricated rubber products
 - Industrial chemicals
 - Paints, varnishes, lacquers, enamels and allied products (excluding boiling processes)
 - Pesticides and agricultural chemicals
 - Plastic, synthetic rubber and synthetic fibers
 - Prefabricated wooden buildings, veneer and plywood, and containers
- (2) Recycling operations conducted entirely within an enclosed building.
- (3) Conditionally permitted uses in the Commercial Industrial District, except for those conditionally permitted uses from other land use districts which are incorporated by reference in the Commercial Industrial District.
- (4) Automobile service stations.
- (5) Child-care centers operated for employees on the premises.
- (6) Motor freight terminals.
- (7) Truck terminals or "truck stops" which provide services such as storage, parking, repair, and sale of fuel to the trucking industry.

Section EV3.1015 Prohibited Uses

Any use not listed as permitted, conditionally permitted, or permitted as an accessory use is prohibited in the Regional Industrial District.

Section EV3.1020 Development Standards

The development standards of the Commercial Industrial District (Section EV3.0920) shall apply to all property in the Regional Industrial District.

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CHAPTER 11. SPECIAL DEVELOPMENT DISTRICT

Section EV3.1101 Intent

The Special Development District is intended to provide an alternative, more flexible site planning process which encourages creative and imaginative planning of administrative professional, commercial or industrial developments, or a mixture of such uses, within the framework of a single cohesive concept plan. The Special Development process provides greater regulatory, land use, and design flexibility than conventional land use district regulations, in order to achieve a more economical and efficient use of the land.

The Special Development District preserves areas in large acreage, providing for interim and support uses, until such time as a Planned Development is approved. Except for interim uses, any development within this district shall be subject to a Planned Development (PD) application, as defined and provided for in Division 1 of the Specific Plan. The development standards for PD projects shall be based upon the approved development plan or use permit and conditions of approval.

Section EV3.1105 Locational Standards

- (a) The district is located in undeveloped urban areas having relatively large parcel sizes, where flexibility of design and land use designations would provide beneficial development.
- (b) The area has access to existing or planned infrastructure facilities to support planned development.
- (c) The location shall be consistent with the General Plan text and maps.

Section EV3.1110 Permitted Interim Land Uses

The following uses are permitted as interim uses and do not require submittal of a Planned Development application:

- (1) Agriculture as a continuation of the existing land use, including orchards, groves, nurseries, field crops, tree crops, berry crops, bush crops, truck gardening and commercial flower growing, and all necessary structures and appurtenances thereof.
- (2) Single family dwelling units on parcels of twenty (20) acres or more.

Section EV3.1111 Permitted Land Uses

The following uses are permitted subject to approval of a Planned Development application:

- (1) Uses permitted in the General Commercial or Commercial Industrial District.
- (2) Uses permitted in the Administrative Professional District.
- (3) Uses permitted in the Public Institutional District.
- (4) Uses permitted in the Open Space District.

Section EV3.1112 Buffer Land Uses

Where determined to be appropriate, a special buffer area shall be established adjacent to existing single family residential homes which abut the Special Development District, in order to ensure a logical transition of uses. The following uses are permitted within this buffer area:

- (1) All uses listed in Sections EV3.1110 and EV3.1111.
- (2) All uses permitted in the Single Residential District.

Section EV3.1113 Accessory Land Uses

All accessory uses listed in the General Commercial District, Commercial Industrial District, Administrative Professional District, and Public Institutional District are permitted as accessory uses in the Special Development District.

Section EV3.1114 Conditionally Permitted Land Uses

All conditional uses listed in the General Commercial District, Commercial Industrial District, Administrative Professional District, and Public Institutional District are permitted in the Special Development District subject to approval of a Conditional Use Permit.

Section EV3.1115 Prohibited Uses

Any use not listed as permitted, conditionally permitted, or permitted as an accessory use is prohibited in the Special Development District.

Section EV3.1120 Development Standards

- (a) For interim uses as listed in Section EV3.1110 (a), development standards are as follows:
 - (1) Minimum lot size shall be twenty (20) acres.
 - (2) Maximum building height shall be thirty-five (35) feet.
 - (3) Minimum building setbacks:
 - (A)

Front Yard	25 feet
Street side yard	25 feet
Side and rear yards	20 feet
 - (B) Where front or side street is designated as a Special Landscaped Street in Section EV4.0115 (a), see Section EV4.0115 for setback and landscaping requirements.
- (b) Development standards for Planned Development projects shall be based upon the approved development plan or use permit and conditions of approval attached to the plan by the reviewing agency. All Planned Developments shall adhere to the Community Design standards as outlined in Division 4, and to the requirements for PD approval contained in Division 1, Chapter 4. Where the SD District is located adjacent to existing single family residential uses, special attention shall be paid to the development compatibility standards set forth in Section EV4.0225.

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CHAPTER 12. PUBLIC INSTITUTIONAL

Section EV3.1201 Intent

The Public Institutional District is intended to preserve and protect public facilities and those privately owned facilities which provide a service to the general public, including schools, post offices, fire stations, hospitals, civic centers, and publicly owned land. Due to the broad service function of this District and the difficulty of planning all public uses in advance, the Public Institutional District may be designated throughout the plan area, provided the use does not conflict with other established uses.

Section EV3.1205 Locational Standards

- (a) The area is occupied or will be occupied by public or closely related private facilities providing services or functions for the general public.
- (b) The uses are not detrimental to adjacent land uses.
- (c) The area has adequate public services to accommodate the needs of the proposed use on a given site.
- (d) The location shall be consistent with the General Plan text and maps.

Section EV3.1210 Permitted Land Uses

The following uses are permitted within the Public Institutional District. New construction shall require Commission Review and Approval as established in the Redlands Municipal Code. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b).

- (1) Agriculture as a continuation of the existing land use including orchards, groves, nurseries, field crops, tree crops, berry crops, bush crops, truck gardening and commercial flower growing, and all necessary structures and appurtenances thereof.
- (2) Government offices and facilities, including corporate yards.
- (3) Sewage treatment plants operated by a government agency.

Section EV3.1213 Conditionally Permitted Land Uses

The following uses may be permitted subject to approval of a Conditional Use Permit. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b).

- (1) Transportation, Communication and Utility Facilities, including but not limited to the following types of uses:
 - Airports, heliports, and associated uses
 - Electrical, gas, water and sewage transmission facilities
 - Microwave communication towers and facilities
 - Radio and television stations and towers
- (2) Public Services:
 - Executive, legislative and judicial functions and offices
 - Government protective functions and postal services
 - Hospitals, sanitariums, convalescent and rest homes
 - Public works maintenance and storage yards
 - Sanitary landfills
 - Recycling operations conducted entirely within an enclosed building.
- (3) Educational Services
 - Day Care Centers (public or private)
 - Primary, middle/junior high, and high schools
 - Private Universities, colleges, junior colleges, and professional schools.
 - Vocational, trade, and special training schools
- (4) Cultural, Entertainment and Recreational Facilities
 - Convention facilities
 - Golf courses
 - Historical and monument sites
 - Museums and art galleries
 - Parks, playgrounds, athletic fields
 - Planetariums, aquariums, botanical gardens and zoos
 - Recreation and community centers
- (5) Other uses similar to the above listed uses if approved by the Planning Commission at a public hearing, as provided in Section EV3.0135.

Section EV3.1215 Prohibited Uses

Any use not listed as permitted, conditionally permitted, or permitted as an accessory use is prohibited in the Public Institutional District.

Section EV3.1220 Development Standards

- (a) All lots shall have adequate width, depth and area to accommodate all required parking, setbacks, landscaping, loading, trash enclosures and access requirements.
- (b) Building or structure height shall not exceed FAA height limits as determined in accordance with Part 77 of the FAA regulations. Also refer to Floor Area Ratio - Section EV4.240 (a).
- (c) Minimum building setbacks shall be as follows:
 - (1)

Front yard	25 feet
Street side yard	25 feet
Side yards	10 feet
Rear yard	20 feet
 - (2) Where front or side street is designated as a Special Landscaped Street in Section EV4.0115 (a), see Section EV4.0115 for setback and landscaping requirements.
- (d) For requirements on landscaping, walls, access, parking, loading, trash enclosures, lighting and storage, and signs, the provisions of Division 4 shall apply.

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CHAPTER 13. OPEN SPACE DISTRICT

Section EV3.1301 Intent

The Open Space District creates and preserves areas for limited development which are not suited for permanent occupancy or intensive uses due to some specific characteristic of the land. Such lands may be subject to environmental hazards, may contain resources requiring preservation, or may be designated as suitable for recreational open space. Publicly owned land and uses of a predominantly open nature are included in this district.

Section EV3.1305 Locational Standards

- (a) The area consists of land under public ownership.
- (b) The area consists of privately owned land when use of **said** land would endanger public health, safety and welfare due to topographic constraints or environmental hazards.
- (c) The area consists of a buffer separating industrial or commercial districts from residential districts.

Section EV3.1310 Permitted Land Uses

The following uses are permitted within the Open Space District. New construction shall require Commission Review and Approval as established in the Redlands Municipal Code. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b).

- (1) Agriculture, including orchards, groves, nurseries, field crops, tree crops, berry corps, bush crops, truck gardening and commercial flower growing.
- (2) Cultural, Entertainment and Recreational Facilities, including but not limited to:
 - Arboretums, rose gardens, botanical gardens
 - Golf courses
 - Hiking, bicycle, and equestrian paths and trails
 - Parks, playgrounds, athletic fields
- (3) Flood control structures

- (4) One (1) dwelling unit on the same parcel of land as a permitted use needing continual supervision, to be occupied exclusively by a caretaker and his family.

Section EV3.1315 Prohibited Uses

Any use not listed as permitted or conditionally permitted is prohibited in the Open Space District.

Section EV3.1320 Development Standards

- (a) No minimum lot area shall be required.
- (b) No minimum lot dimensions shall be required.
- (c) Maximum coverage by structures shall be five (5%) percent of the lot area.
- (d) Buildings and structures shall have a maximum height of fifteen (15) feet.
- (e) Minimum building setbacks shall be as follows:
 - (1)

Front yard	25 feet
Street side yard	25 feet
Interior side yard	10 feet
Rear yard	20 feet
 - (2) Where front or side street is designated as a Special Landscaped Street in Section EV4.0115 (a), see Section EV4.0115 for setback and landscaping requirements.
- (f) For requirements on walls, fences, lighting, access, parking, signs and other design standards, the provisions of Division 4 shall apply.

CHAPTER 14. SCIENCE RESEARCH PARK

Section EV3.1401 Intent

The Science Research Park Land Use District creates, preserves and enhances areas for science, medical, and research and development uses seeking a special working environment which has prestige value. This district provides for the grouping of high technology industries and supportive business, professional, very light manufacturing, assembly and accessory retail services having related and compatible functions. The science research park district incorporates high development standards and land uses of low potential adverse environmental affects to insure a high level of compatibility with more sensitive land use, and to minimize impacts on existing citrus uses.

Section EV3.1405 Locational Standards

- (a) The area will be substantially occupied by relatively contiguous groupings of science, research, business and professional establishments which conduct their operations wholly within enclosed structures.
- (b) The district may be located adjacent to sensitive land uses and may function as a buffer between potentially incompatible land use.
- (c) The District will be compatible with impacts typically associated with moderate industrial and mineral extraction uses including noise, vibration and air quality.
- (d) The area is free of environmental constraints and has physical conditions which can sustain proposed development, including all required parking, circulation, landscaping and setbacks.
- (e) The location shall be consistent with the General Plan text and maps.

Section EV3.1410 Permitted Land Uses

The following uses are permitted within the Science Research Park District. New construction shall require Commission Review and Approval as established in the Redlands Municipal Code. Determinations regarding similar uses not specifically listed shall be made pursuant to §EV3.0135(b).

- (1) Agriculture as a continuation of the existing land use, including orchards, groves, nurseries, field crops, tree crops, berry crops, bush crops, truck gardening and commercial flower growing, and all necessary structures and appurtenances thereof.

- (2) Administrative and professional services which are related to and supportive of the science and research. Such uses may include but are not limited to:
- Accounting, Auditing and Bookkeeping
 - Attorneys and Legal Services
 - Counseling
 - Engineering, Architectural and Planning offices
 - Medical and Dental Laboratories
 - Physicians, Surgeons, Chiropractors, Dentists, Oral Surgeons, Orthodontists
- (3) Retail services which are incidental and accessory to a permitted use. (For example: A pharmacy associated with a medical facility, or food services developed within a corporate office.)
- (4) Services, including but not limited to the following types of uses:
- Advertising firms
 - Banks, savings and loans, and credit unions
 - Blueprinting and Photocopying Services.
 - Business and Management
 - Commodity services
 - Consulting firms
 - Corporate facilities
 - Detective and Protective services
 - Holding and Investment services
 - Insurance companies
 - Stenographic, Secretarial, Clerical and Mailing services
- (5) Manufacturing firms primarily engaged in manufacturing professional and scientific goods, including but not limited to:
- Clocks and watches
 - Computers
 - Engineering, scientific and research instruments
 - Measuring instruments
 - Optical goods
 - Orthopaedic and prosthetic and surgical appliances
 - Photographic equipment
 - Surgical and medical instruments
- (6) Business and research offices related to the administration and operation of permitted industrial uses.

Section EV3.1412 Accessory Land Uses

The following uses are permitted as an accessory use to a primary permitted or conditionally permitted use:

- (1) Retail uses which are incidental to a permitted use

Section EV3.1415 Prohibited Uses

Any use not listed as permitted, conditionally permitted, or permitted as an accessory use is prohibited in the Science Research Park District.

Section EV3.1420 Development Standards

- (a) Minimum lot area shall be twenty thousand (20,000) square feet. The requirement shall not be construed to prevent condominium-type developments which have smaller lot sizes as long as they have a mandatory owners association, and the land area under the jurisdiction of the association meets the minimum lot size requirements.
- (b) Minimum parcel width shall be one hundred (100) feet, and minimum parcel depth shall be one hundred fifty (150) feet.
- (c) Buildings and structures shall have a height not greater than fifty (50) feet.
- (d) Lot area coverage by buildings or structures shall not exceed sixty (50%) percent of the total lot area.
- (e) Minimum building setback lines shall be as follows:
 - (1)

Front yard	35 feet
Street side yard	25 feet
Interior side yard	None required except adjacent to
Rear yard	residential district
 - (2) Where district abuts a street designated as a Special Landscaped Street in Section EV4.0115 (a), see Section EV4.0115 for setback and landscape requirements.
 - (3) Where district abuts a residential district or residential portion of a Planned Development, see Section EV4.0225 (e) for setback and landscape buffer requirements.

- (f) For requirements on parking, landscaping, walls and fences, loading, lighting, storage and other design standards, the provisions of Division 4 shall apply.
- (g) All lots shall have a minimum of sixty (60) feet of access on a dedicated and improved street.
- (h) The provisions Division 4 shall apply to signs. In addition, the maximum area of any sign facing a residential zone shall be seventy-five (75) square feet.
- (i) Any structure originally designed as a residence, or as an accessory to a residence, shall not be used for any industrial purpose.
- (j) A business or industrial building shall not be constructed or established on the same lot together with an existing residential building.
- (k) All buildings erected, constructed or established, shall be entirely new and complete structures designed for business or industrial purposes only.
- (l) All uses shall be conducted within a completely enclosed building except as follows:
 - (1) Off-street parking and loading areas.
 - (2) No outdoor storage shall be permitted except for fleet vehicles and light trucks (not exceeding 6,000 pounds) outdoor storage tanks may be permitted at a height not to exceed eight (8) feet from highest finished grade wind screen from public view by concrete masonry or other similar materials.

DIVISION 4. COMMUNITY DESIGN**CHAPTER 1. CIRCULATION****Section EV4.0101 Introduction**

- (a) A critical element of the Specific Plan is the provision of an efficient and comprehensive circulation plan. In order for development to occur in an orderly and systematic manner, access into the study area must be improved and the circulation system within the study area must be adequate to accommodate traffic volumes generated by the project.
- (b) The intent of the plan, in terms of circulation, is to provide an effective circulation system, establish a streetscape design that will enhance the character of the East Valley, and maintain consistency with current and future transportation planning efforts at the state, regional and local levels.
- (c) While most transportation in and around the study area is by private automobile, special consideration has been given to public transit, pedestrian access, and recreational trails.
- (d) Figure 4-1 illustrates the backbone circulation system proposed for the East Valley Corridor. The circulation system is adopted as a portion of the General Plans of the County of San Bernardino, the City of Loma Linda, and the City of Redlands.

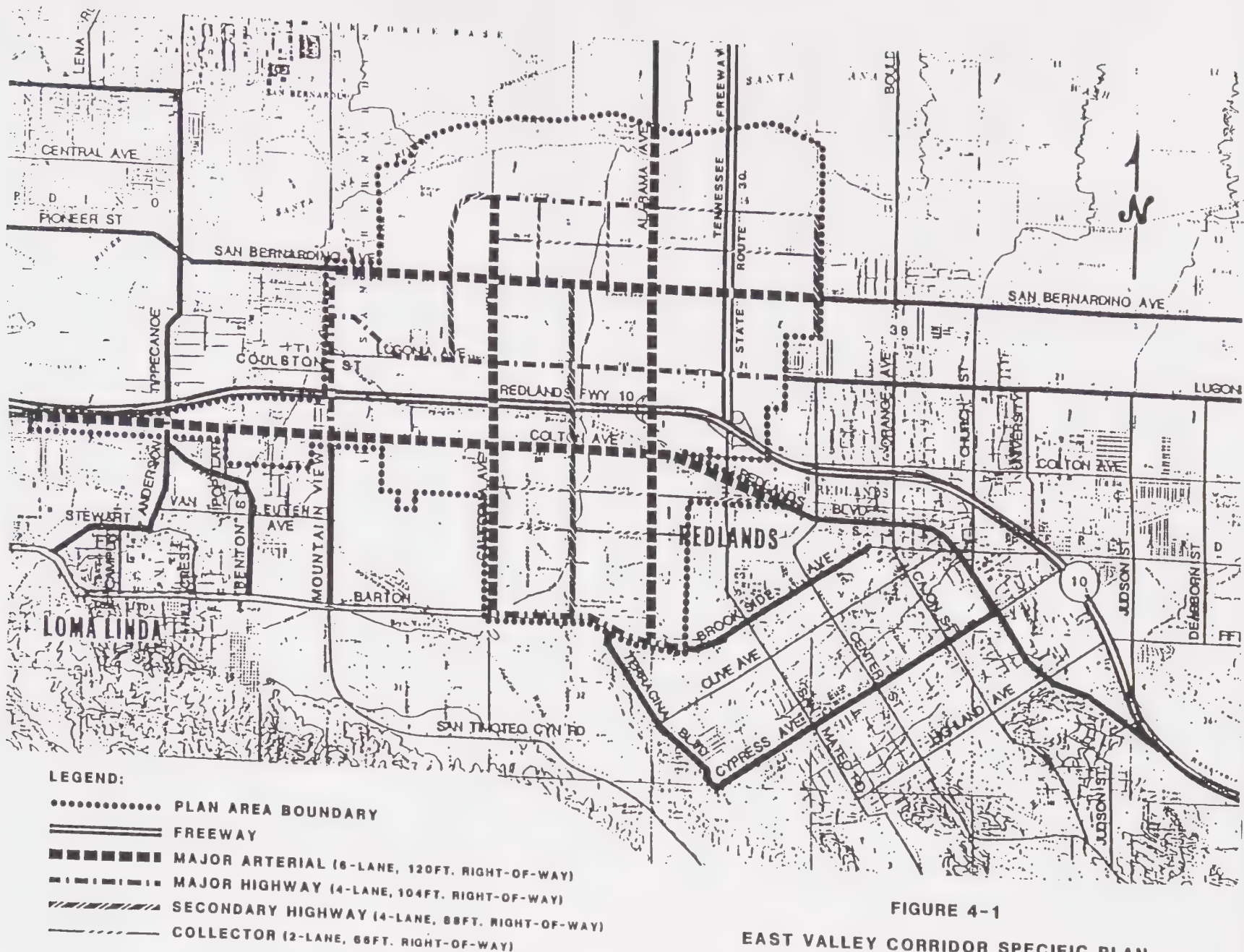


FIGURE 4-1
EAST VALLEY CORRIDOR SPECIFIC PLAN
CIRCULATION PLAN

Section EV4.0105 Circulation Plan

- (a) The major traffic routes through the study area are Interstate 10 (the San Bernardino Freeway) and State Route 30 (the Tennessee Freeway). The Specific Plan provides for a network of six lane major arterial and four lane major and secondary highways in conjunction with collector streets to be constructed or improved within the area. This proposed circulation system will provide additional regional access to the area as well as build a backbone system for the proposed development.
- (b) The following roadways shall be designated as major arterials:
- California Street from Palmetto Avenue to Barton Road
Alabama Street from the Santa Ana River to Barton Road
Redlands Boulevard from the western plan boundary to Park Avenue
San Bernardino Avenue from Mountain View Avenue to Texas Street
- (c) The following roadways shall be designated as major highways:
- Palmetto Avenue from California Street to Alabama
Lugonia Avenue from Mountain View Avenue to the eastern plan area boundary
Barton Road from California Street to Kansas Street
Mountain View Avenue from Redlands Boulevard to San Bernardino Avenue
Anderson Street from Redlands Boulevard to I-10
- (d) The following roadways shall be designated as secondary highways:
- Nevada Street from San Bernardino Avenue to Barton Road
Texas Street from Palmetto Avenue to southern plan area boundary
Palmetto Avenue from Lugonia Avenue to California Street
- (e) The following roadways shall be designated as collectors:
- Olive Avenue from California Street to Alabama Street
Pioneer Avenue from Alabama Street to Texas Street
Collector connecting Palmetto Avenue and San Bernardino Avenue, west of Nevada Street
Collector connecting Palmetto Avenue and San Bernardino Avenue, east of Nevada Street
Park Avenue from California Street to Redlands Boulevard
Citrus Avenue from California Street to Kansas Street

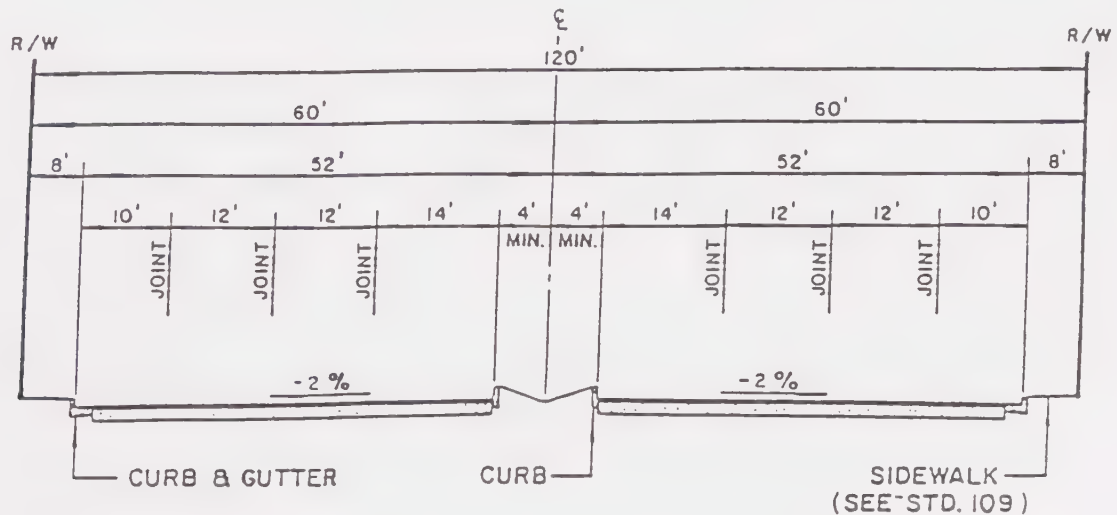
- (f) In instances where roadways are designated on the Circulation Plan where no road currently exists, the location and design standards, including the grade and alignment, will be determined by the reviewing authority at the time of submittal of design plans for the individual project.

Section EV4.0110 Road Standards

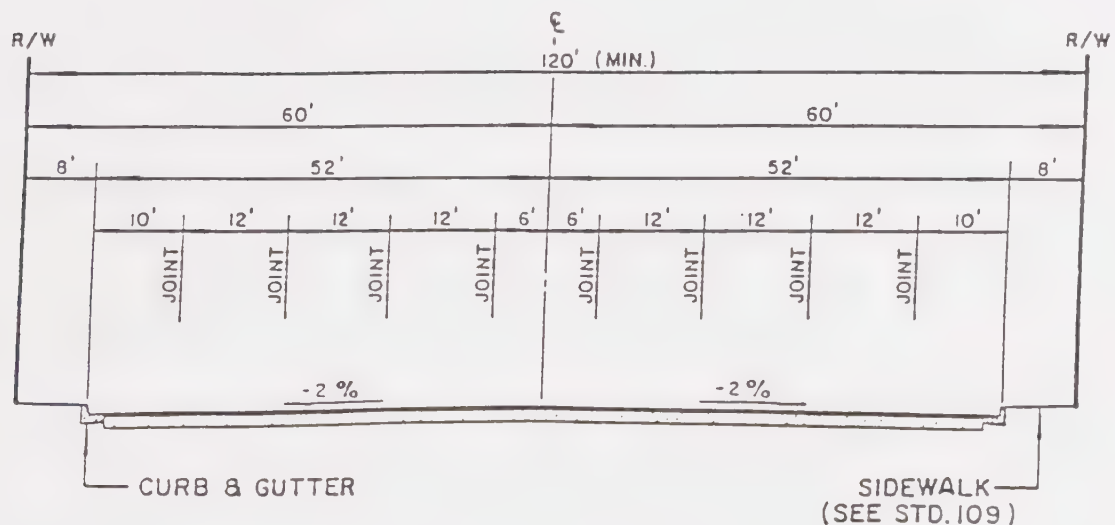
- (a) Standards and specifications for transportation facilities and all work within the road rights-of-way shall conform to the County's Standards and Specifications Manual unless specifically modified herein. Typical sections of roads within the planning area are shown in Figures 4-2 through 4-6.
- (b) Right-of-way shall be required as shown on the Specific Plan Circulation map except in the following instances:
 - (1) On California Street between Palmetto Avenue and Almond Avenue, the existing fan palm row shall be placed in a 22-foot landscaped median. To accommodate this median, the road right-of-way shall be 126 feet instead of 120 feet on this stretch.
 - (2) On Palmetto Avenue between California Street and the existing alignment of Nevada Street, the existing double row of fan palms will be placed in a 34-foot landscaped median. To accommodate this median, the road right-of-way shall be 106 feet instead of 104 feet on this stretch.
- (c) In order to accommodate medians and parkways landscaped with fan palm rows, sidewalks shall be placed outside of the right-of-way on the following streets. In these instances, the reviewing agency shall be granted a sidewalk easement for maintenance.

Redlands Boulevard
San Bernardino Avenue
Alabama Street
Palmetto Avenue between California Street and Nevada Street
- (d) Access control standards shall be as follows:
 - (1) No direct driveway access from individual residences shall be permitted onto major arterials, major highways or secondary highways.

- (2) Intersections shall be placed a minimum of 400 feet centerline to centerline from freeway on and off ramps.
 - (3) Offset intersections shall be a minimum of 300 feet centerline to centerline.
 - (4) Access shall be controlled on major arterials and major highways to minimize curb cuts and facilitate the flow of traffic. Any new development or subdivision of land adjacent to these roadways shall be required to dedicate vehicular access rights, except where access points are shown on an approved Site Plan. Shared access and parking, and use of side streets for access, shall be required whenever possible.
 - (5) All development proposals shall be designed so as to provide for a free flow of vehicles in and out of the site as well as for easy access to the various activity areas within each site.
 - (6) Placement of access points into each site shall minimize interference with the off-site circulation system.
 - (7) Where medians are located in the street fronting the site, driveways should be provided where median breaks occur.
 - (8) Adequate provisions shall be made for emergency vehicle access, with a minimum of two (2) points of ingress and egress provided to each site.
- (e) Intersection design shall conform to the following standards:
- (1) Intersections less than 80 degrees shall not be permitted without special approval from the reviewing agency. The 90-degree angle is preferable.
 - (2) If offset streets are to be continuous, they shall be curved to approach the intersection so as to effect a right-angle alignment.
 - (3) At intersections where additional traffic lanes are indicated by traffic analysis, provision shall be made for requiring additional right-of-way and curb width within 300 feet of the intersection.



TYPICAL SECTION
WITH RAISED MEDIAN



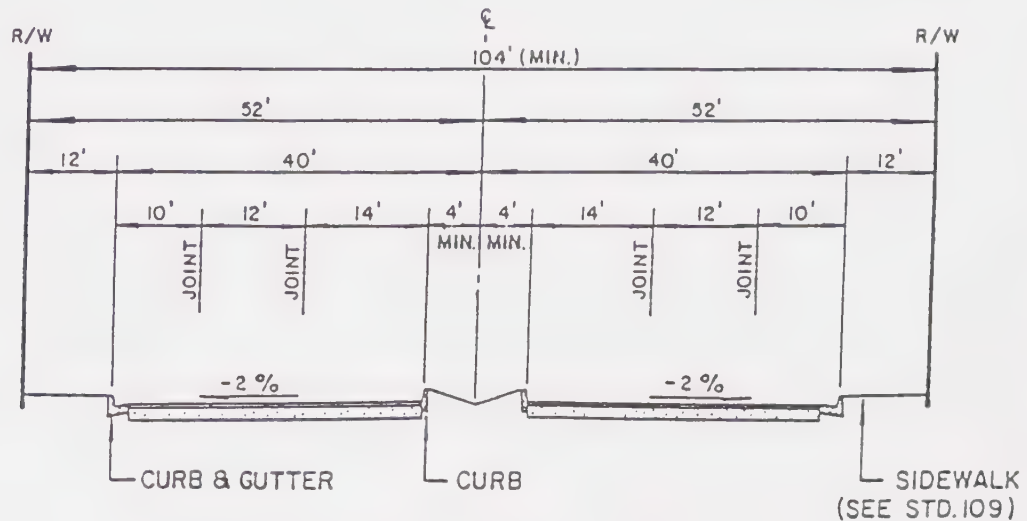
TYPICAL SECTION
WITH CONTINUOUS LEFT TURN LANE

NOTES:

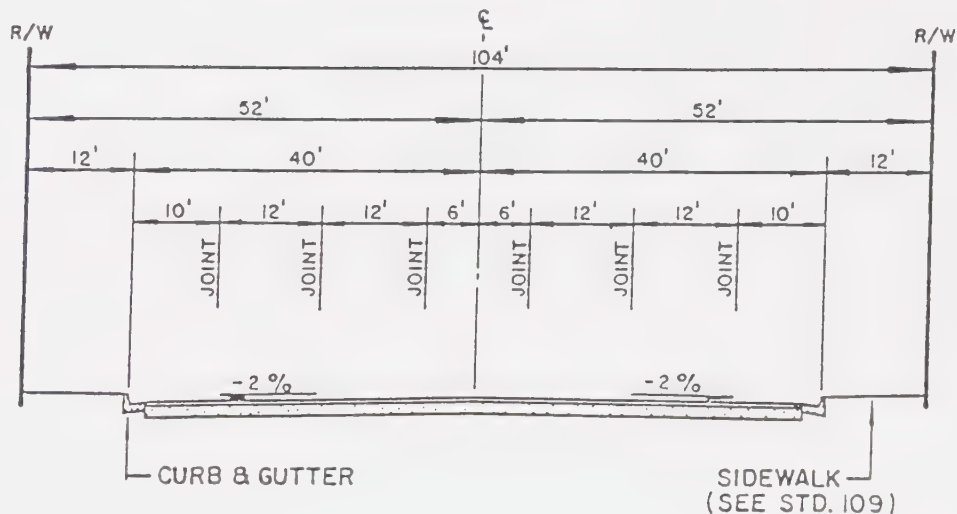
1. STRUCTURAL SECTION OF ROADWAY SHALL BE DETERMINED FROM SOILS TESTS AND SO INDICATED ON CONSTRUCTION PLANS.
2. DRAINAGE FACILITIES SHALL BE PROVIDED TO DEWATER RAISED MEDIAN AREAS.
3. 10' SHOULDER AREAS MAY BE DESIGNATED AS A BIKE LANE AND EMERGENCY PARKING ONLY.

FIGURE 4-2

MAJOR ARTERIAL



TYPICAL SECTION
WITH RAISED MEDIAN

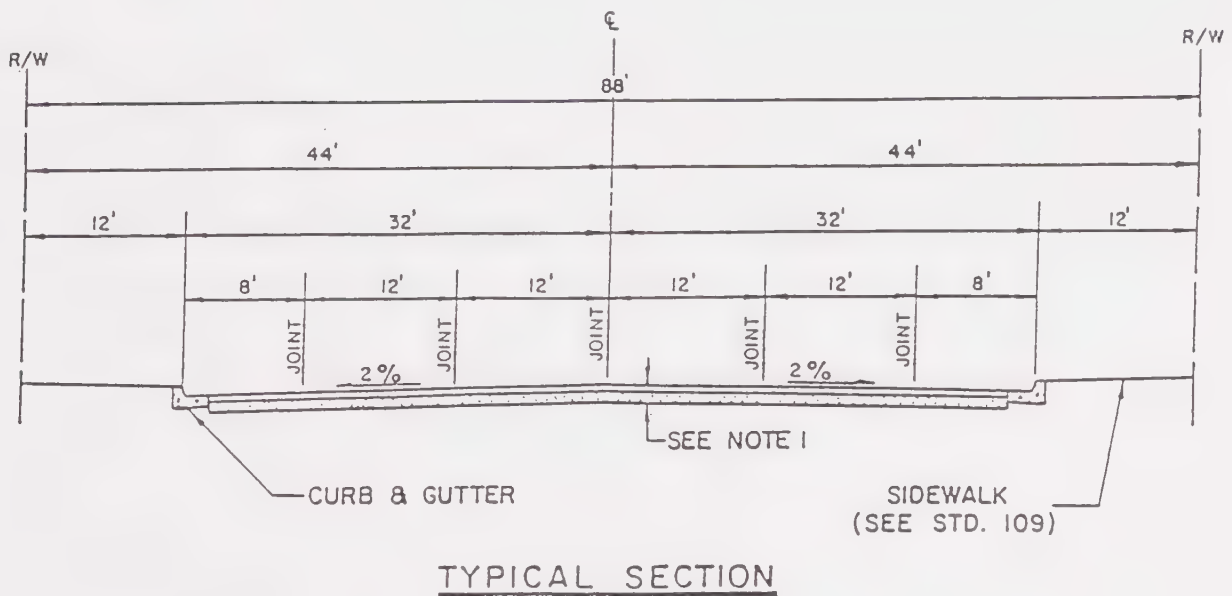


TYPICAL SECTION
WITH CONTINUOUS LEFT TURN LANE

NOTES:

1. STRUCTURAL SECTION OF ROADWAY SHALL BE DETERMINED FROM SOILS TESTS AND SO INDICATED ON CONSTRUCTION PLANS.
2. DRAINAGE FACILITIES SHALL BE PROVIDED TO DEWATER RAISED MEDIAN AREAS.
3. 10' SHOULDER AREAS MAY BE DESIGNATED AS A BIKE LANE AND EMERGENCY PARKING ONLY.

FIGURE 4-3
MAJOR HIGHWAY

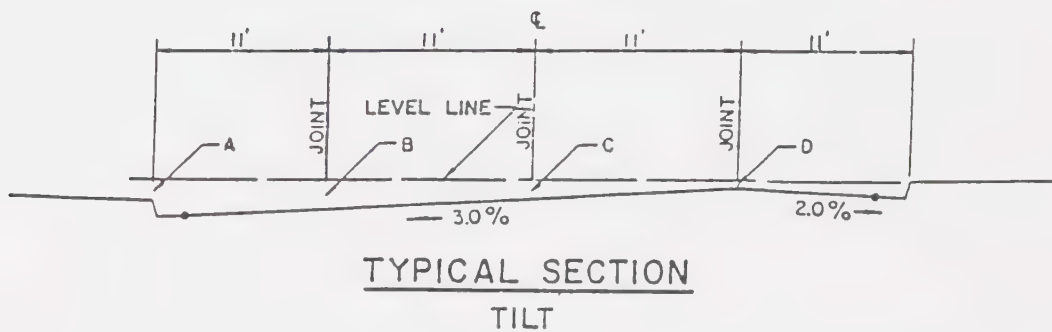
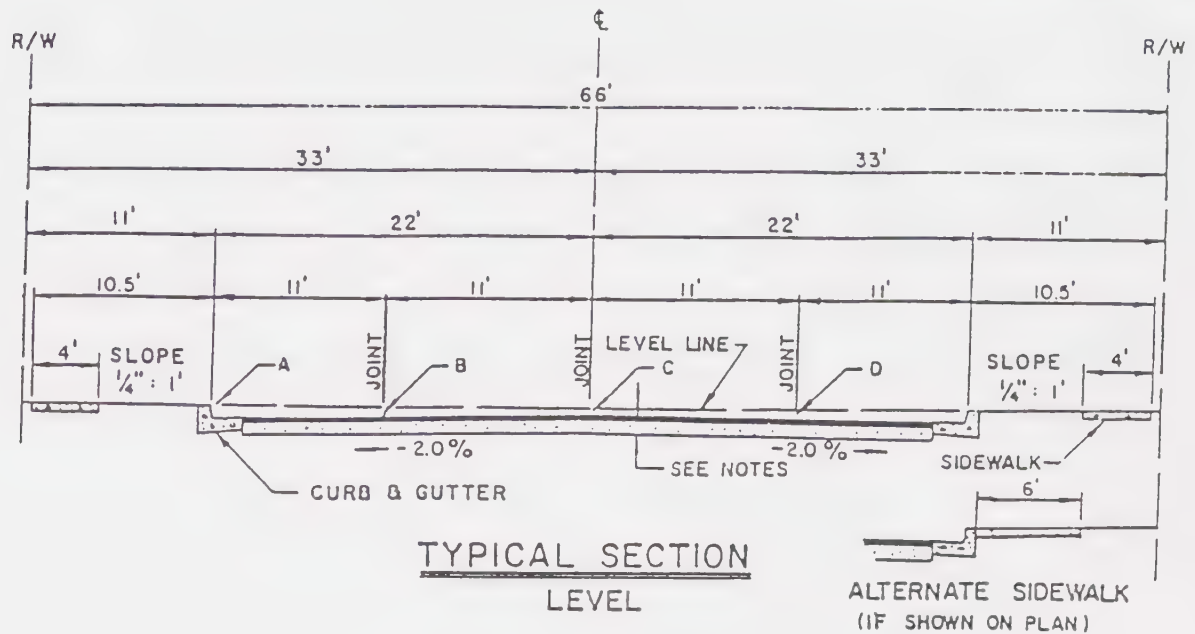


NOTES:

1. STRUCTURAL SECTION OF ROADWAY SHALL BE DETERMINED FROM SOILS TESTS AND SO INDICATED ON CONSTRUCTION PLANS.
2. 8' SHOULDER AREAS MAY BE DESIGNATED AS A BIKE LANE AND EMERGENCY PARKING ONLY.

FIGURE 4-4

SECONDARY HIGHWAY

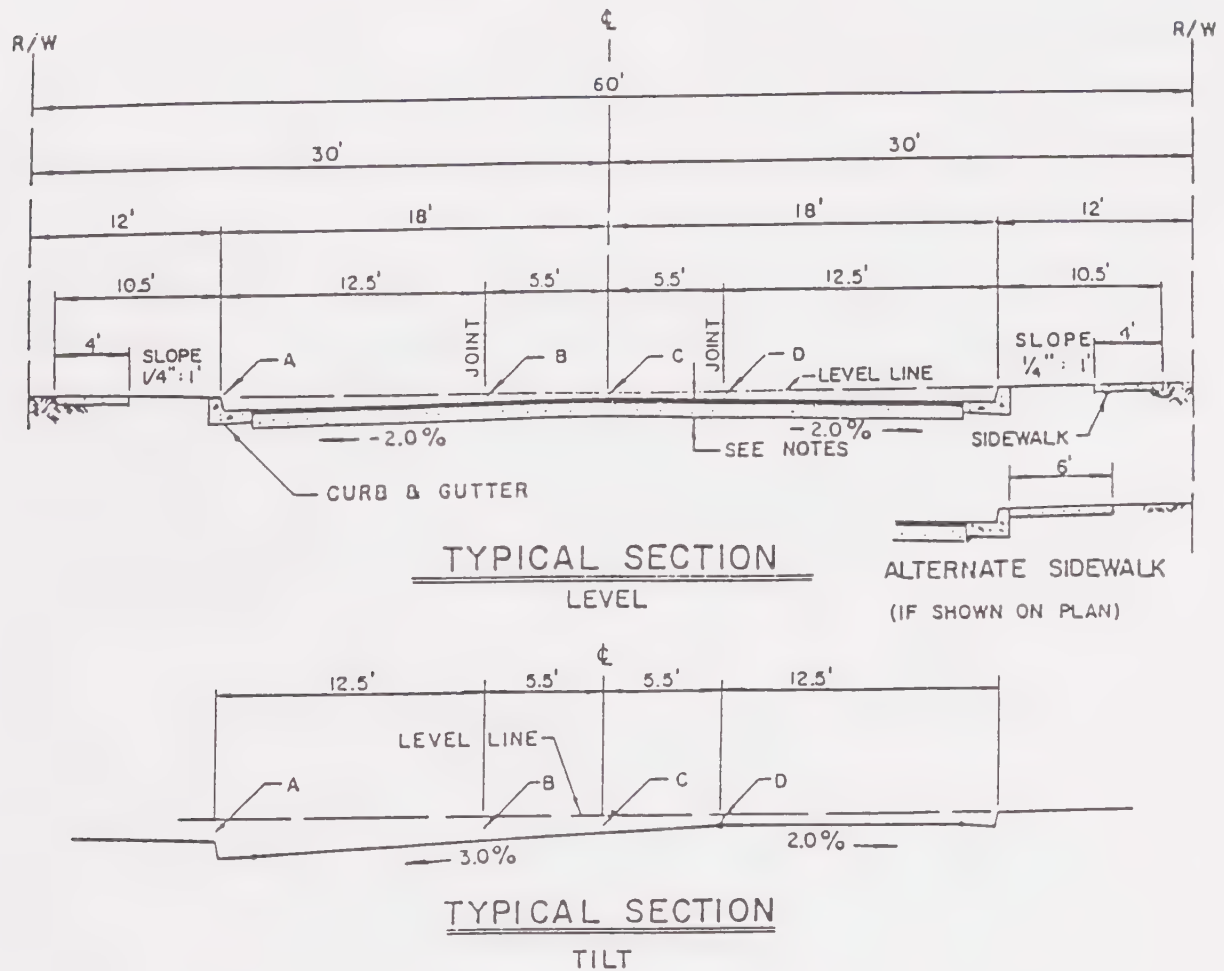


		A	B	C	D	() INDICATES ABOVE LEVEL LINE
8" CURB	LEVEL	0.00'	0.36'	0.14'	0.36'	
	TILT	0.76'	1.02'	0.69'	0.36'	
6" CURB	LEVEL	0.00'	0.19'	(0.03)	0.19'	
	TILT	0.76'	0.85'	0.52'	0.19'	

NOTE

1. STRUCTURAL SECTION OF ROADWAY SHALL BE DETERMINED FROM SOILS TESTS AND SO INDICATED ON CONSTRUCTION PLANS.
2. MINIMUM DESIGN PAVING THICKNESS SHALL BE 0.20' ASPHALT CONCRETE.
3. CONSTRUCTION OUTSIDE R/W WILL REQUIRE SLOPE EASEMENTS.

FIGURE 4-5
COLLECTOR STREET



		A	B	C	D
8" CURB	LEVEL	0.00'	0.33'	0.22'	0.33'
	TILT	0.44'	0.66'	0.50'	0.33'
6" CURB	LEVEL	0.00	0.16'	0.05'	0.16'
	TILT	0.44'	0.49'	0.33'	0.16'

NOTE

1. STRUCTURAL SECTION OF ROADWAY SHALL BE DETERMINED FROM SOILS TESTS AND SO INDICATED ON CONSTRUCTION PLANS.
2. MINIMUM DESIGN PAVING THICKNESS SHALL BE 0.20' ASPHALT CONCRETE.
3. CONSTRUCTION OUTSIDE R/W WILL REQUIRE SLOPE EASEMENTS
4. WHEN PREPARING SUBGRADE FOR PAVING, CENTERLINE CROWN ON THE "LEVEL SECTION" SHALL BE RELOCATED EITHER LEFT OR RIGHT 0.50' TO MATCH CROWN BREAK IN PAVING MACHINE.

FIGURE 4-6**LOCAL STREET**

- (f) The following streets shall have landscaped center medians:
 - Palmetto Avenue
 - California Street, from Barton Road to Palmetto Avenue
 - Redlands Boulevard, from California Street to New York Street
 - Barton Road, from Terracina Boulevard to Kansas Street
- (g) No parking, except for emergency parking, shall be allowed on any street which has four or more lanes, (includes major arterials, major highways, and secondary highways).
- (h) Cul-de-sac standards shall be as follows:
 - (1) Cul-de-sacs shall have a minimum paved radius of 40 feet.
 - (2) Length of cul-de-sac shall not exceed 600 feet.
- (i) Private streets shall be constructed in accordance with approved Planned Development Standards.

Section EV4.0115 Special Landscaped Streets

(a) Introduction

The dominant design element for the East Valley Corridor will consist of unified streetscape themes to be established throughout the planning area, incorporating consistency of setbacks, street planting, berming, walls and sidewalks. In order to establish this consistency, major arterials within the planning area have been designated as Special Landscaped Streets, with specific design guidelines developed for each one.

A key element of the streetscape design, providing a dramatic and recognizable image for the area, will be a continuation of the existing grid pattern of Washingtonia Robusta palms (Mexican fan palms), both north and south of Interstate 10. Understory plantings of canopy type street trees, shrubs and groundcover will provide shade, color and a more human scale to the streetscape. The landscape design and plant palette for each major street is intended to be consistent throughout the planning area.

Properties which abut any of the streets listed below must landscape the area adjacent to the roadway as provided in Sections EV4.0115

(b) through (k). The only improvements which may encroach into this landscaped area are driveway entrances, sidewalks, planters, fences or walls not to exceed three and a half (3-1/2) feet in height. Parking areas adjacent to roadways are subject to the landscape requirements of Section EV4.02S0.

Specific design and or plant materials may be modified at the discretion of the approving agency when there is a conflict with the location of public utilities. Development applications requesting a deviation from specific design standards or plant materials shall clearly identify what conflict exists with public utilities, what specific standards apply, and how the conflict will be resolved. The approving agency may modify adopted design or plant material requirements when a demonstrated conflict with public utilities exists that cannot be resolved without deviating from adopted standards.

Special Landscaped Streets within the East Valley Corridor area include the following:

- Redlands Boulevard (see Section EV4.0115(b))
- San Bernardino Avenue (see Section EV4.0115(c))
- Alabama Street (see Section EV4.0115(d))
- California Street (see Section EV4.0115(e))
- Palmetto Avenue, between California and Alabama Streets (see Section EV4.0115(f))
- Lugonia Avenue (see Section EV4.0115(g))
- Barton Road (see Section EV4.0115(h))
- Mountain View Avenue (see Section EV4.0115(i))

(b) **REDLANDS BOULEVARD**

Redlands Boulevard, designated as a major arterial, extends the length of the planning area south of and parallel to Interstate 10. Land use designations adjacent to Redlands Boulevard include General

Commercial, Commercial Industrial and some Residential. Much of the property adjacent to Redlands Boulevard is already developed with commercial and light industrial uses. Existing landscape treatments on this street include parkway planting with meandering sidewalks in Loma Linda, and street trees with a median established in portions of Redlands. The intent of the landscape guidelines on Redlands Boulevard is to recognize and upgrade existing development, and to extend and unify existing landscape elements.

Setbacks

Building setback line (from property line) 25 feet. Parking setback line (from property line) 15 feet.

Sidewalks

Meandering sidewalks, six (6') foot width, minimum of three (3) feet from back of curb, per Section EV4.0130 (a) and (c).

Groundcover Within Public Right-of Way

Turf

Groundplane

Berms or other screening required where parking areas are visible from right-of-way.

Street Trees

Pinus canariensis (Canary Island Pine)
Liquidambar styraciflua

Trees to be randomly spaced to provide varied streetscape with view windows, at the equivalent of one (1) tree per thirty (30) linear feet.

Median (In Redlands only)

Crape myrtle and Erythea armata (palms) with shrubs and groundcover plantings.

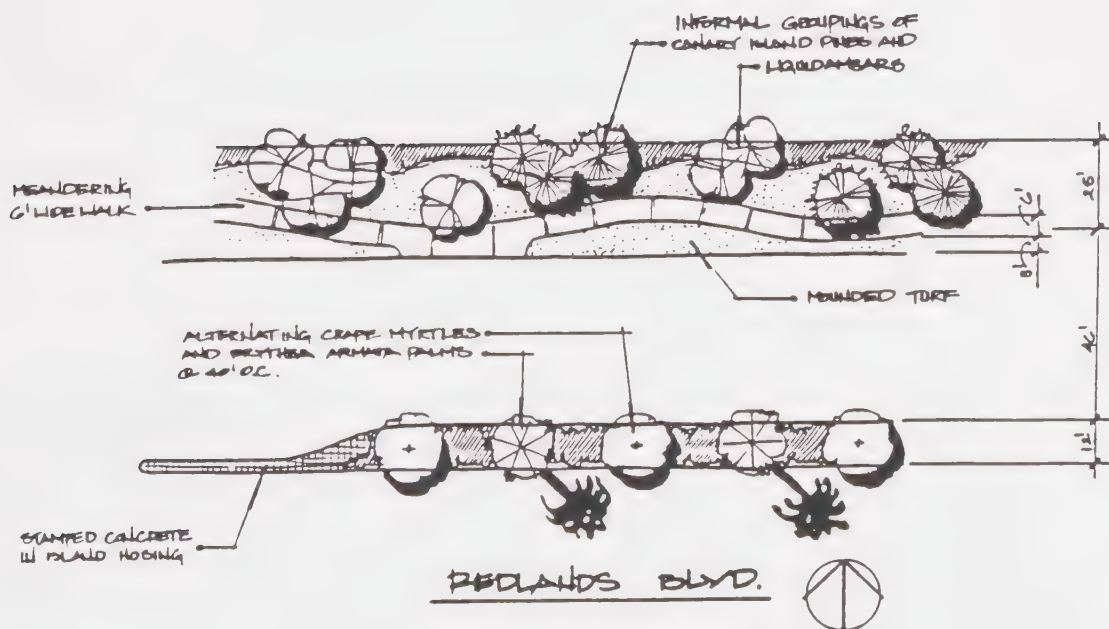
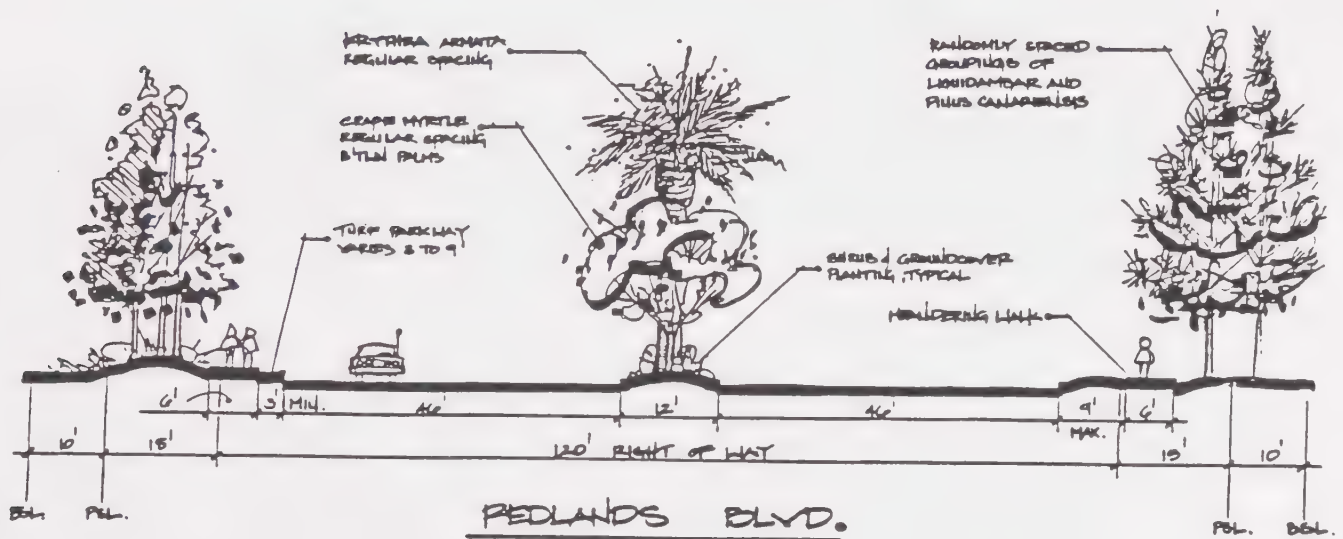


FIGURE 4-7

(c) SAN BERNARDINO AVENUE

San Bernardino Avenue is designated as a major arterial and is a major east-west thoroughfare connecting the cities of Redlands and San Bernardino. The predominant designated land use adjacent to this street is Special Development, with some Regional and General Commercial adjacent to the Tennessee freeway. Most of the area around San Bernardino Avenue is presently undeveloped, with orange groves and field crops the major uses in this area. The intent of the landscape guidelines for San Bernardino Avenue is to extend the palm row landscape element, enhance the identity of the East Valley Corridor on a major roadway, and create an aesthetic buffer between the street and planned commercial and industrial uses.

Setbacks

Building setback line (from property line) 30 feet. Parking setback line (from property line) 15 feet.

Sidewalk

Six (6') foot straight sidewalk, eight (8') feet from back of curb.

Groundplane

Berms or other screening required adjacent to parking areas.

Groundcover Within Public Right-of-Way

Turf

Street Trees

New planting of single row of *Washingtonia robusta* on each side of roadway between curb and sidewalk, planted forty (40') feet on center. Camphor trees (*Cinnamomum camphora*) planted in landscaped setback area on regular spacing, in triangular pattern with palm rows. Salvage and relocate existing mature palms as roadway is widened.

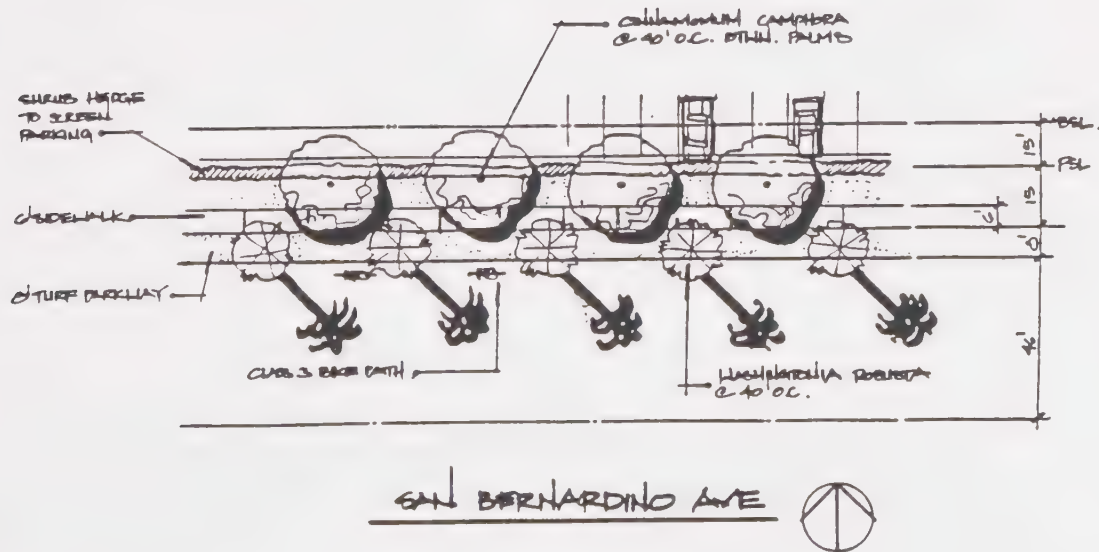
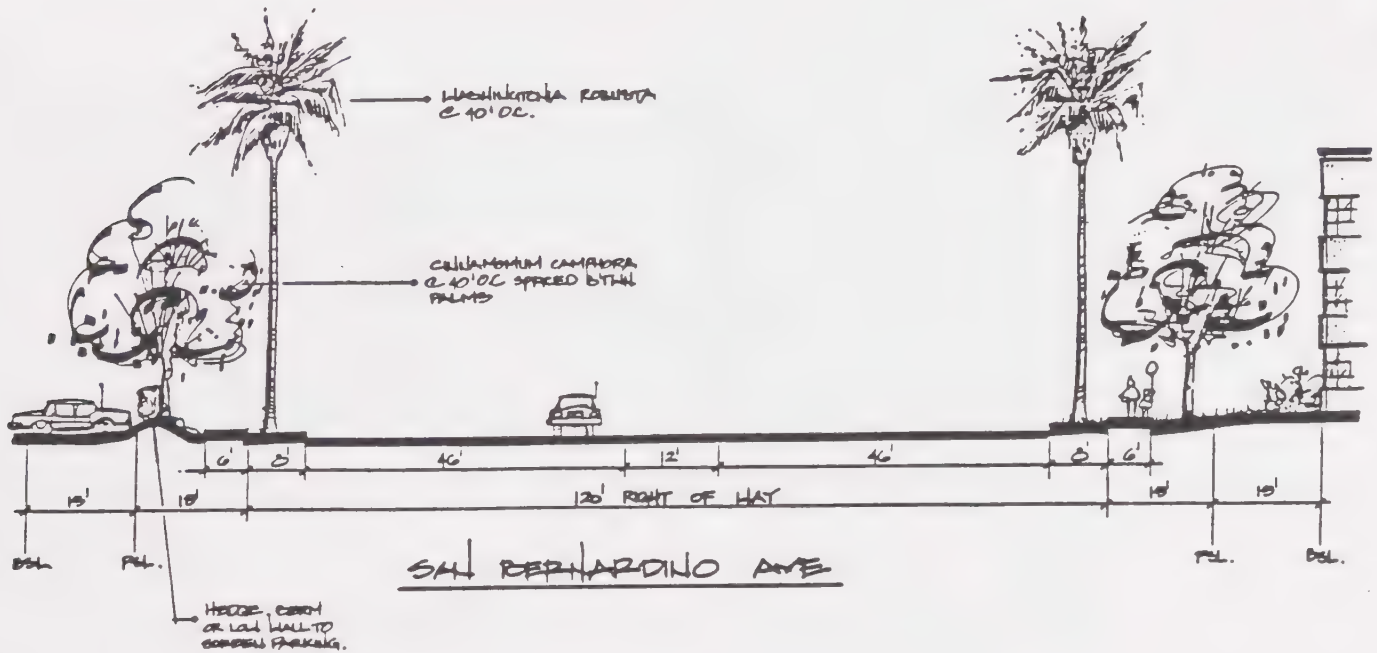


FIGURE 4-8

(d) ALABAMA STREET

Alabama Street, which parallels the Tennessee freeway to the west, is designated as a major arterial. Alabama connects Redlands to the community of Highland, and serves as the only arterial access into this portion of the planning area from the north. The existing crossing of Alabama over the Santa Ana River Wash is a causeway which is subject to inundation and washing out. The Circulation Plan calls for construction of a bridge at this location, to make this crossing all-weather.

Land use designations along Alabama include a wide mix of uses from north to south, including Commercial, Industrial, Planned Development, Multiple Residential, and Administrative/ Professional. The portion of Alabama south of Lugonia is already developed with a variety of commercial uses, while the northern portion is agricultural. The developed portion is partially landscaped with street trees (generally palm varieties) and turf.

Building setbacks already established in the developed portion are relatively narrow, while the opportunity to create a wider, more spacious landscaped area exists north of Interstate 10.

The intent of the landscape guidelines for Alabama Street is to create a unified appearance along the street throughout the planning area despite varying land uses, while recognizing existing development and building on established landscape treatment.

Setbacks

Building setback line (from property line) 30 feet. Parking setback line (from property line) 15 feet south of I-10, 30 feet north of I-10.

Sidewalks

Six (6') foot sidewalks behind palm planting area.

Groundplane

Berms or other screening required where parking areas are visible from right-of-way.

Groundcover Within Public Right-of-Way

Turf or groundcover.

Street Trees

Single row of Washingtonia robusta, planted forty (40') feet on center;
understory of Platanus acerifolia, regularly spaced in triangular pattern
with palms.

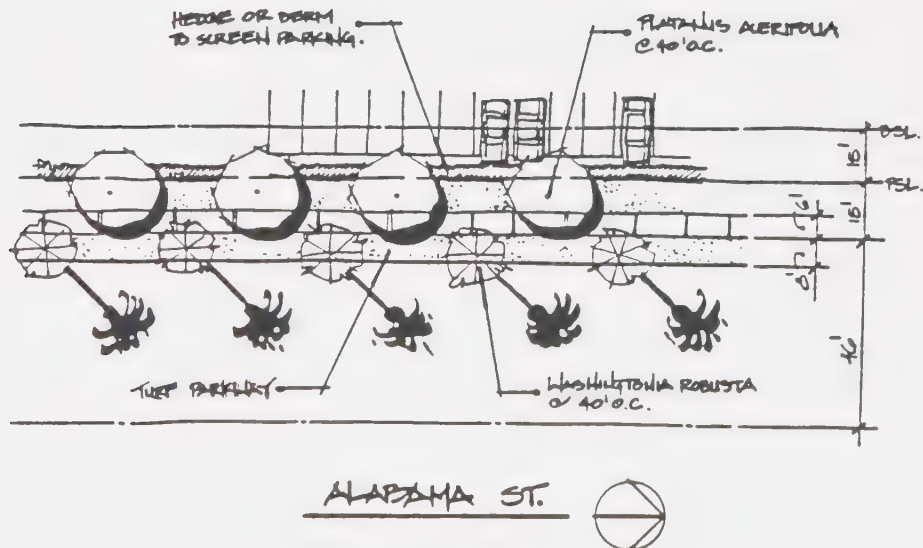
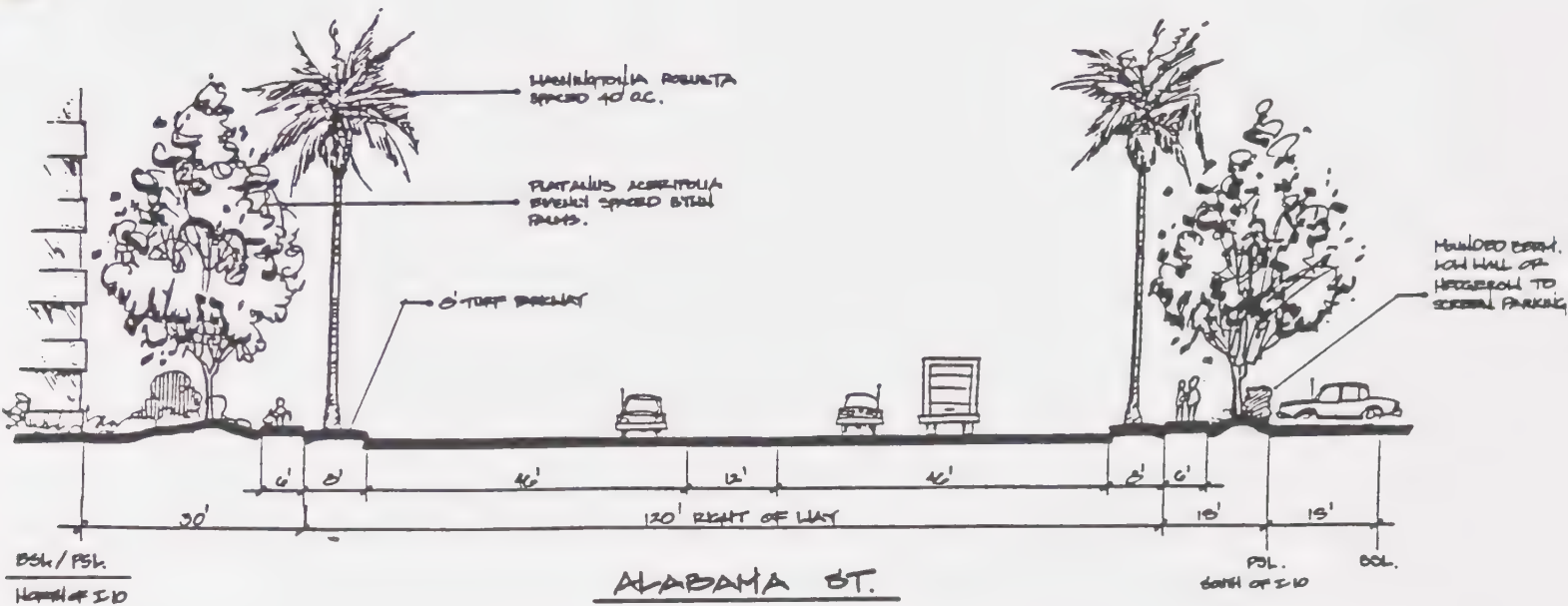


FIGURE 4-9

(e) CALIFORNIA STREET

California Street is designated as a major arterial and provides a major gateway into the planning area from Interstate 10, both to the north and the south. North of I-10, the predominant land use designation is Special Development and the area is undeveloped above Lugonia. South of I-10, land use designations adjacent to California Street include multiple family residential and commercial, and portions of the area are already developed. The landscape guidelines for California Street emphasize the importance of this roadway in establishing the identity of the East Valley Corridor, due to its high visibility from the freeway, anticipated traffic volume, planned link to a regional trail system, and central location. Because of these factors, a wide landscaped median and parkways are planned for the portion of California north of I-10, where no existing development will be affected. South of I-10, the median will be reduced in size and the trail system will be routed onto Citrus Avenue.

Setbacks

Building setback line (from property line) 30* feet. Parking setback line (from property line) 30* feet.

* Where trail system is not adjacent to roadway, setbacks may be a minimum of 25 feet but must average 30 feet.

Sidewalks

Six (6') foot sidewalks adjacent to curb.

Bike Trail

Class I bike path on east side of California Street between Palmetto Avenue and Redlands Boulevard (per Section EV4.0150).

Groundplane

Berms or other screening required adjacent to parking areas. Berms encouraged on parkways.

Groundcover Within Public Right-of-Way

Turf

Street Trees

New planting of single row of Washingtonia robusta on each side of roadway adjacent to curb, planted forty (40') feet on center. Camphor trees (Cinnamomum camphora) planted in landscaped setback area on regular spacing, in triangular pattern with palm rows.

Median

North of Interstate 10, phase median into roadway north of Lugonia Avenue. Between Almond Avenue and Palmetto Avenue, retain existing row of Washingtonia robusta in median. Use occasional understory groupings of crape myrtle. Use river rock in median noses.

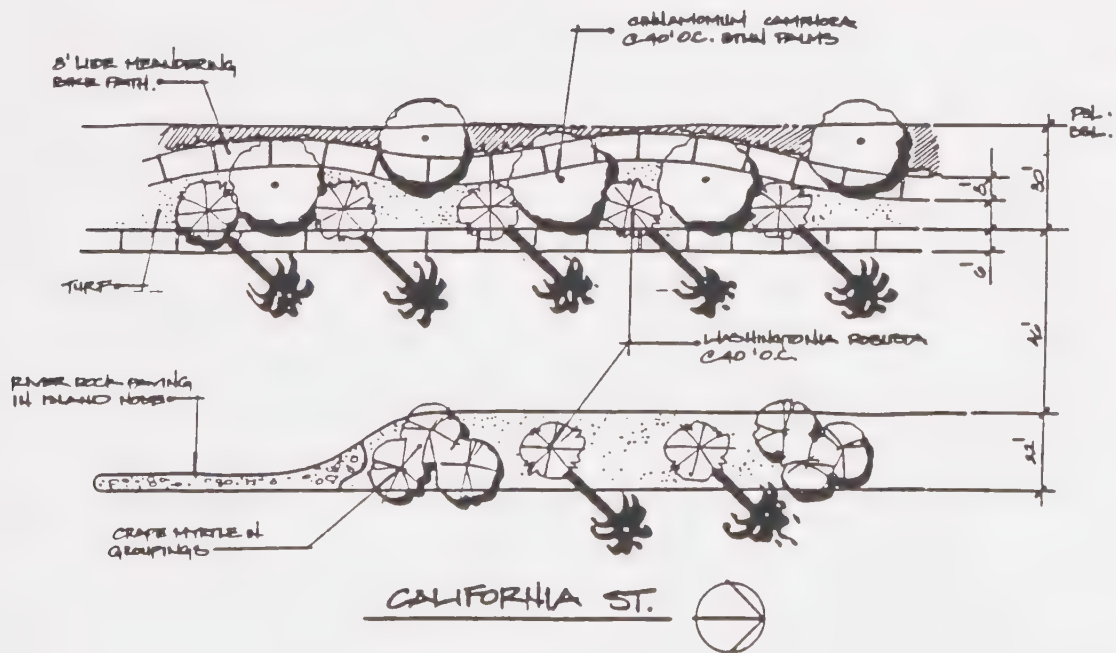
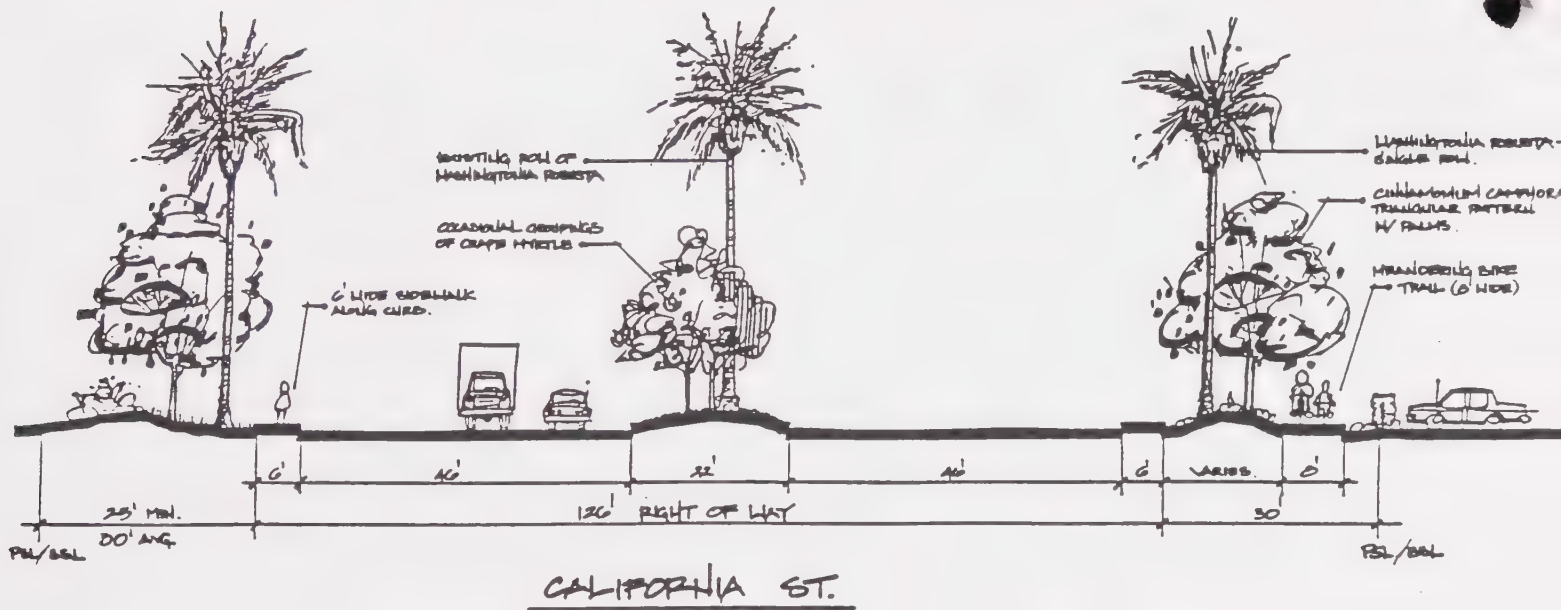


FIGURE 4-10

(f) PALMETTO AVENUE, between California and Alabama Streets

Palmetto Avenue is designated as a major highway between California Street and Alabama Street. It will serve to carry traffic between those two major arterials, and to provide access to the adjacent land designated for Regional Industrial and Special Development. Two existing rows of *Washingtonia robusta*, planted approximately 22 feet apart, extend along Palmetto between California Street and Nevada Street. It is the intent of the landscape guidelines to maintain consistency with the design concepts for California Street, and to preserve and extend the existing palm rows on Palmetto Avenue.

Setbacks

Building Setback line (from property line) 30* feet. Parking setback line (from property line) 30* feet. *Where trail system is not adjacent to roadway, setbacks may be a minimum of 25 feet but must average 30 feet.

Sidewalks

Six (6') foot sidewalks adjacent to curb.

Bike Trail

Class I bike path on north side of Palmetto Avenue (per section EV4.0150).

Groundplane

Berms or other screening required adjacent to parking areas.

Groundcover within Public Right-of-Way

Turf

Street Trees

Camphor trees (*Cinnamomum camphora*) planted thirty (30') feet on center.

Median

Between California Street and (existing) Nevada Street, place double palm row in 34-foot median. Between Nevada Street and Alabama Street, plant new row of Washingtonia Robusta palm trees thirty (30') feet on center in triangular pattern with camphor trees on parkways. Use occasional understory groupings of crape myrtle. Use river rock in median noses.

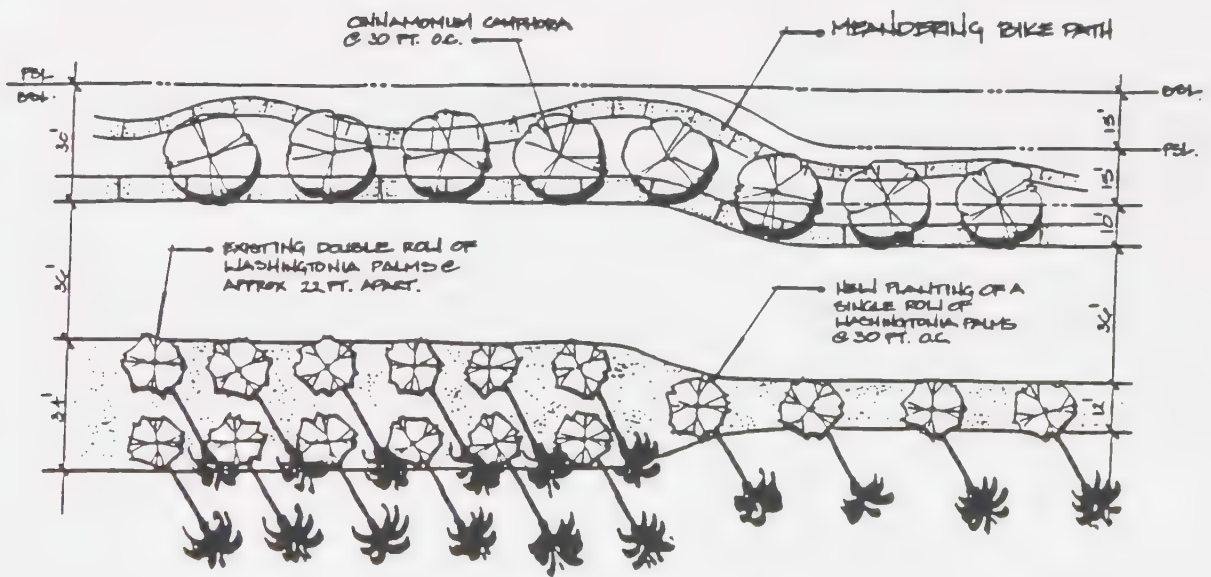
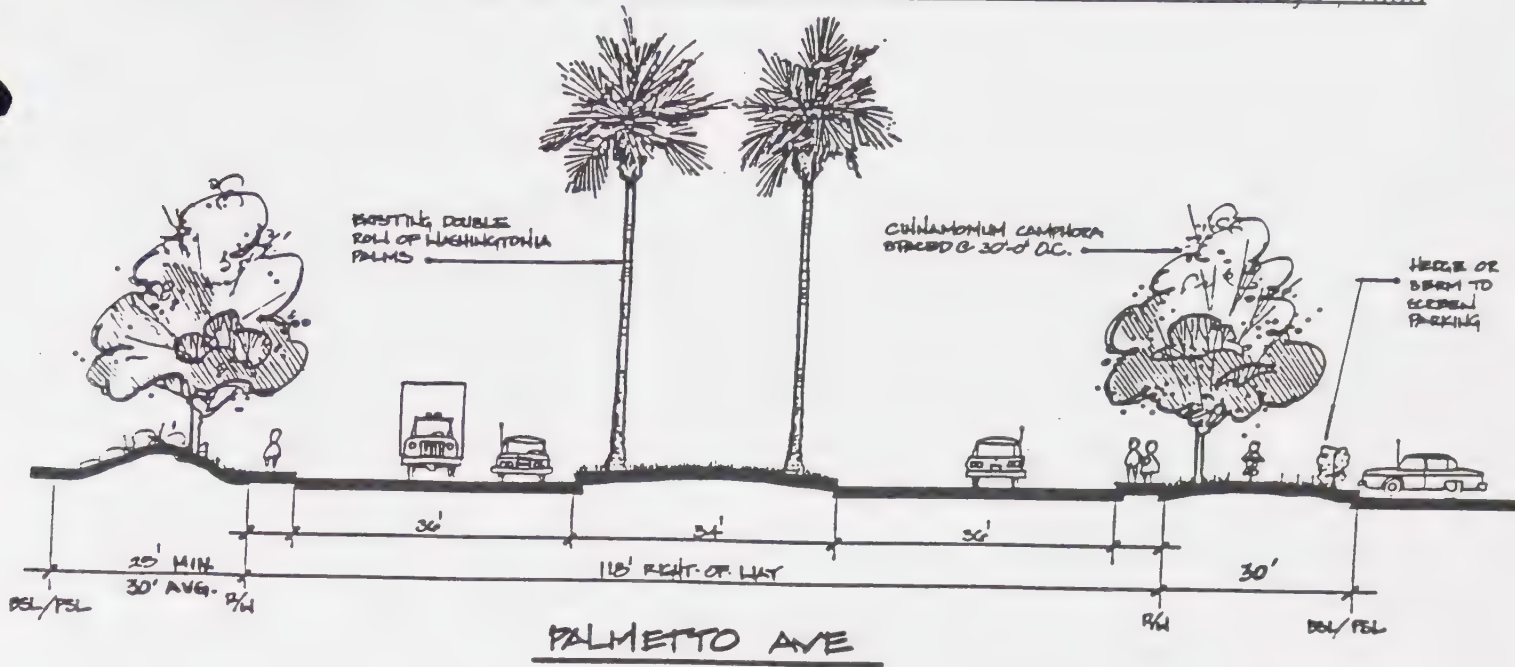


FIGURE 4-11

(g) LUGONIA AVENUE

Lugonia Avenue is designated as a major highway and parallels Interstate 10 to the north. Land use designations adjacent to Lugonia include General Commercial, Special Development and Regional Commercial. An existing landscape element developed on Lugonia is the citrus grove adjacent to Edwards Mansion, a primary focal point on this street. The intent of the landscape guidelines on Lugonia Avenue is to create a spacious, uncluttered "greenbelt" appearance conducive to business park development.

Setbacks

Building setback line (from property line) 30 feet. Parking setback line (from property line) 15 feet.

Sidewalks

Meandering sidewalk, six (6') foot width, minimum of three (3') feet from back of curb, per Section EV4.0130 (a) and (c).

Groundplane

Berms or other screening required where parking areas are visible from right-of-way.

Groundcover Within Public Right-of-Way

Turf

Street Trees

Carrotwood (*Cupaniopsis anacardioides*) and Liquidambar styraciflua planted with random spacing or in grove effect, to provide varied streetscape with view windows, at the equivalent of one tree per thirty (30') linear feet of frontage.

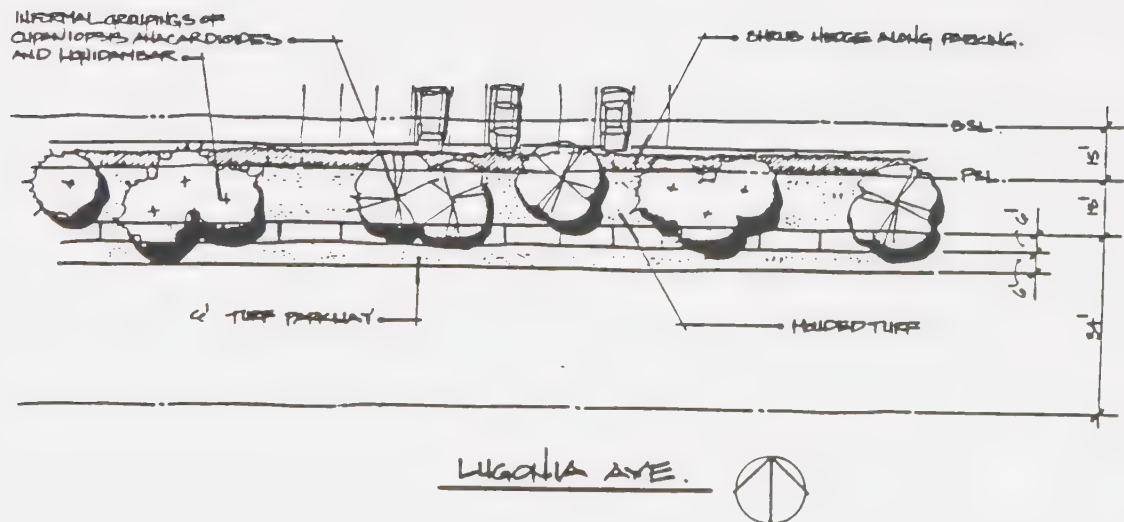
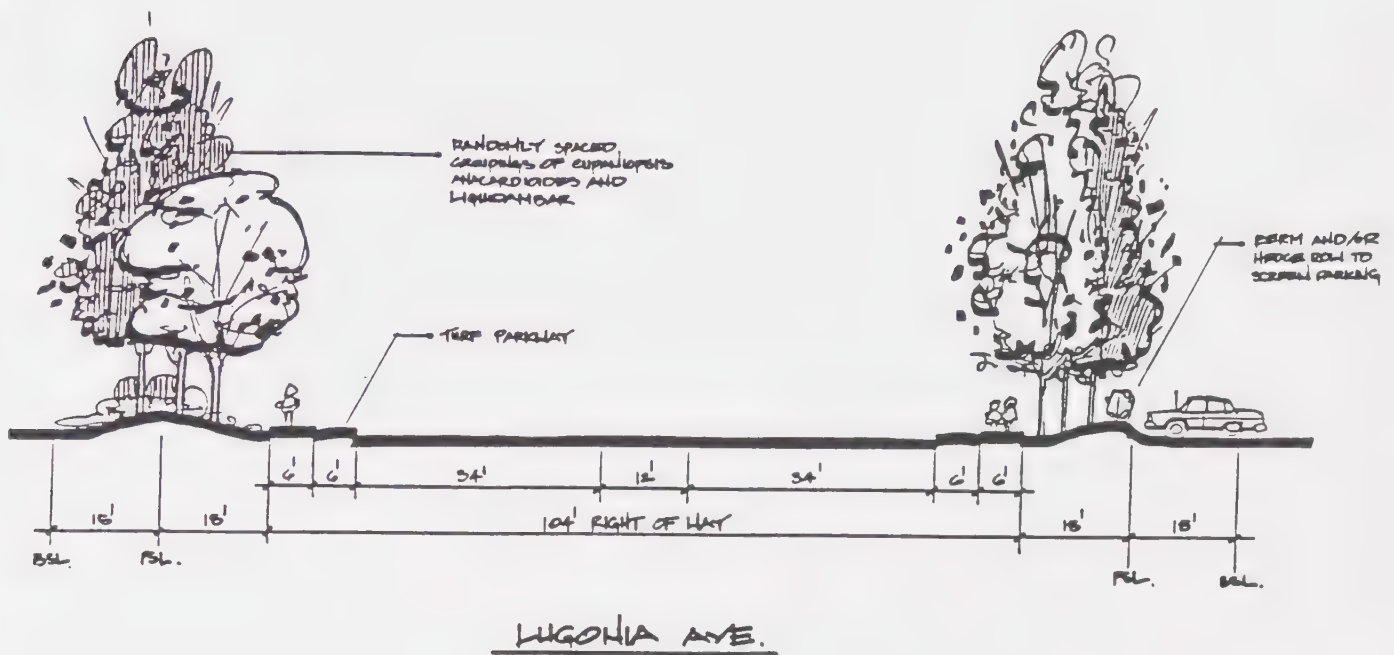


FIGURE 4-12

(h) BARTON ROAD

Barton Road is designated as a major highway and borders the planning area on the south. Land use designations adjacent to Barton Road include Neighborhood Commercial, Administrative/Professional, and Multiple Residential. The primary focal points are the Asistencia Mission and Barton House. Existing landscape themes established on this street include bermed turfgrass with deciduous trees, a landscaped median east of Terracina and scattered Washingtonia filifera (California fan palms). The intent of the landscape guidelines for Barton Road is to maintain existing planting themes, to establish the planning area identity to traffic entering the area, and to enhance rather than detract from historic structures.

Setbacks

Building setback line (from property line) 25 feet. Parking setback line (from property line) 25 feet.

Sidewalks

Six (6') foot sidewalk adjacent to curb.

Bike Trail

Class II bike lane adjacent to curb (per Section EV4.0150).

Groundcover Within Public Right-of-Way

Turf

Groundplane

Berms or other screening required where parking areas are visible from right-of-way.

Street Trees

Washingtonia filifera on triangulated spacing, each row 80' on center; understory planting of Platanus acerifolia and Bauhinia variegata, randomly spaced, averaging one (1) tree per 30 linear feet of frontage.

Median

Bermed turfgrass with rock cobble in noses; *Plantanus acerifolia* on regular spacing, 30 feet on center; understory planting of crape myrtle for accent.

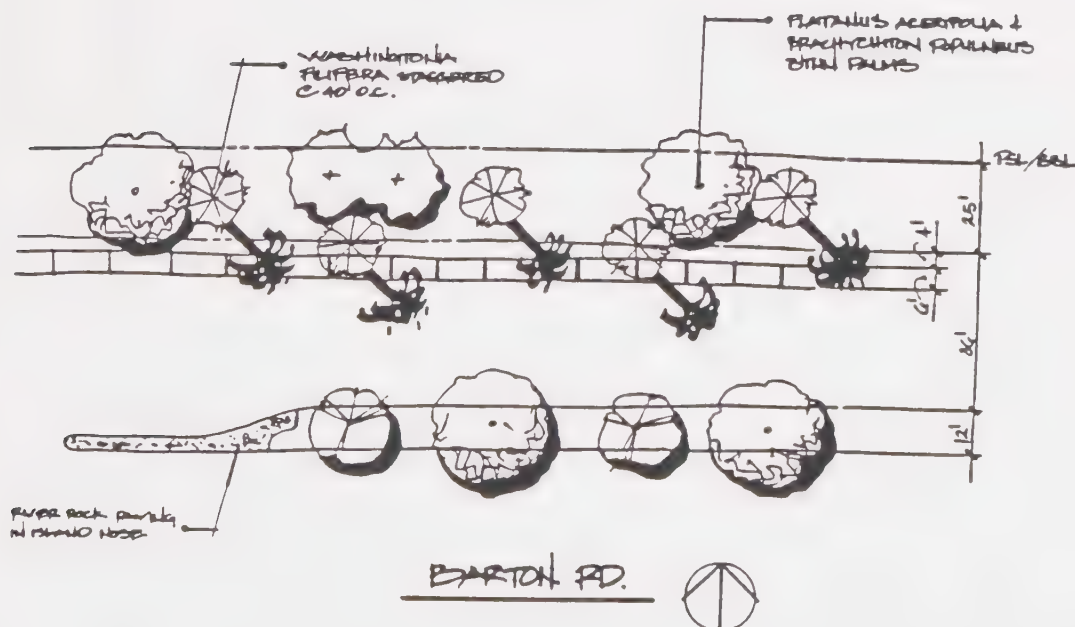
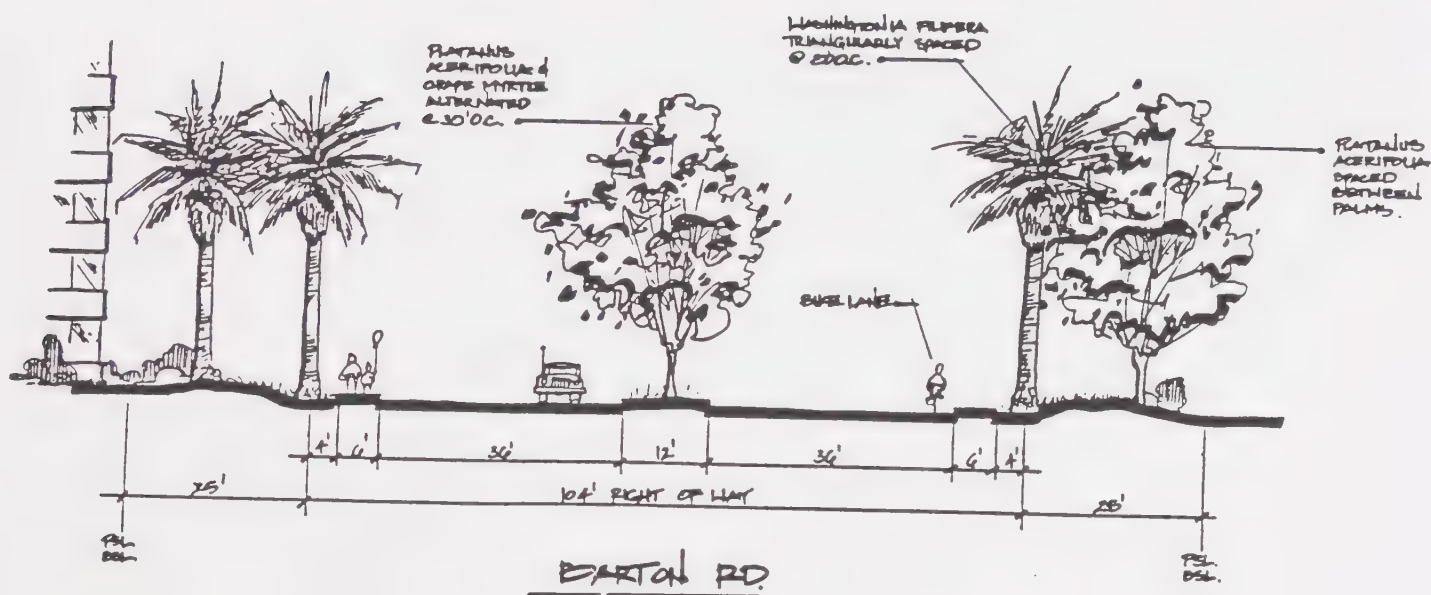


FIGURE 4-13

(i) MOUNTAIN VIEW AVENUE

Mountain View Avenue forms a portion of the western boundary of the plan area, and is designated as a major highway. There is a freeway interchange at Mountain View and I-10. Land use designations adjacent to Mountain View include Planned Development, General Commercial, Commercial/Industrial, and Single Family Residential. South of Interstate 10 there is existing single family residential development and commercial development adjacent to Redlands Boulevard. The northern portion is undeveloped within the planning area; to the west, there is single family residential development. There are established landscape design guidelines along Mountain View within Loma Linda.

The objectives of the landscape guidelines for Mountain View Avenue are to establish an attractive entrance to the planning area at the interchange and a distinctive border treatment to the north, to screen the Edison plant east of Mountain View, and to maintain continuity with Loma Linda's streetscape design.

Setbacks

Building setback line (from property line) 25 feet. Parking setback line (from property line) 25 feet.

Sidewalks

Six (6') foot sidewalks, separated from back of curb.

Groundplane

Berms or other screening required where parking is visible from right-of-way.

Groundcover Within Public Right-of-Way

Turfgrass, and Gazania "Sunrise Yellow".

Street Trees

Liquidambar "Palo Alto", Melaleuca quinquenervia (Cajeput Tree), and Pinus pinea (Italian Star Pine) planted in random spacing or clusters at the equivalent to one tree per thirty (30') linear feet.

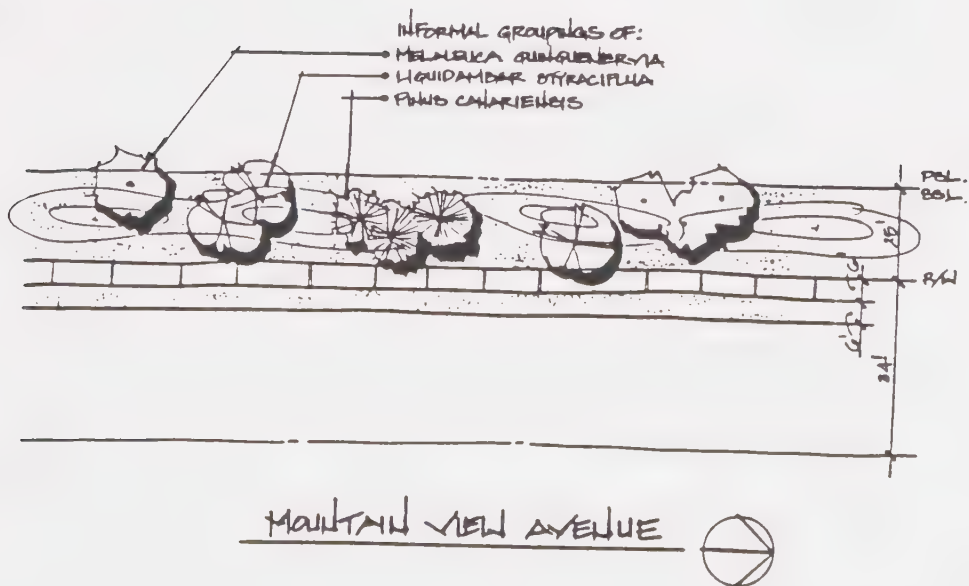
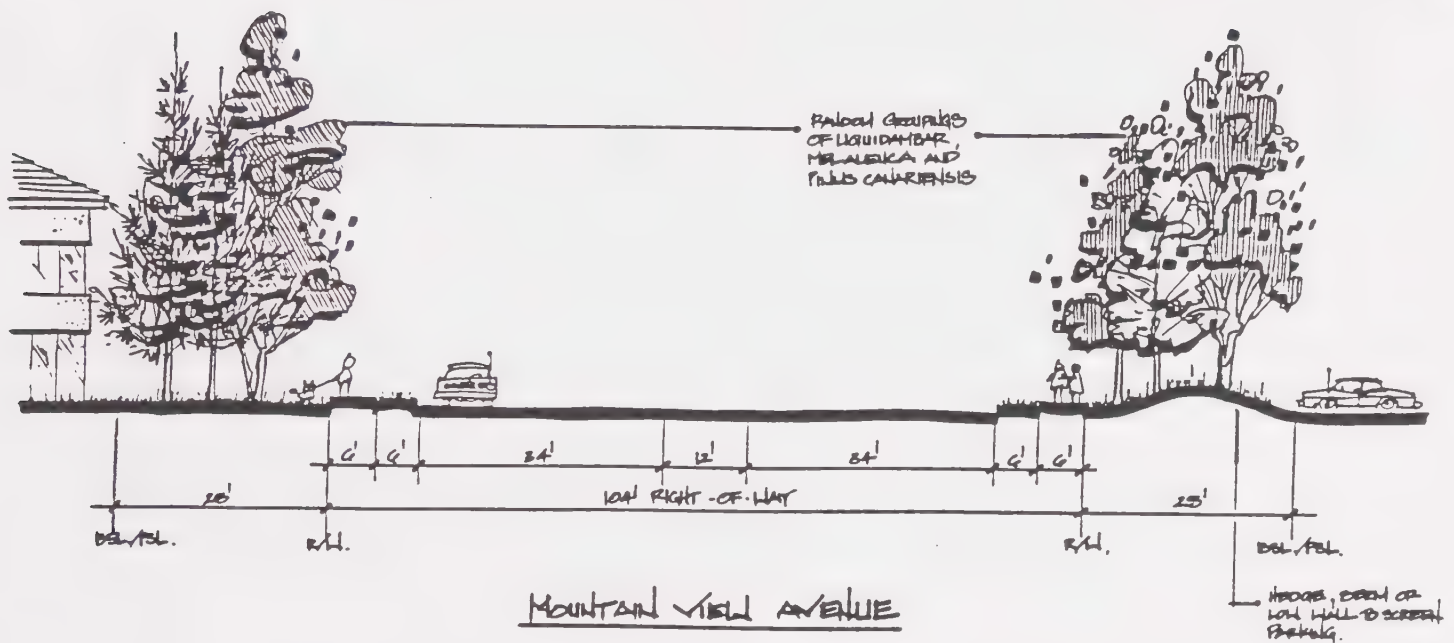


FIGURE 4-14

Section EV4.0120 Special Landscape Requirements for Other Streets

- (a) In addition to existing palm rows along Special Landscaped Streets as outlined in Section EV4.0115, the following streets within the planning area have rows of *Washingtonia robusta* and *Washingtonia filifera* located adjacent to the roadway:
- Olive Avenue
Almond Avenue
Citrus Avenue
Nevada Street
- (b) These trees shall be preserved or relocated in accordance with the guidelines contained in Section EV4.0265 of the Specific Plan. Relocated trees shall be used to enhance or extend palm rows designated on Special Landscaped Streets or to enhance Special Landscaped Intersections.

Section EV4.0125 Setbacks at Intersections

- (a) As part of the streetscape design component of the Specific Plan, intersections shall be designed to provide a unified character throughout the planning area. Intersections shall be classified as follows:
- (1) Primary intersections:
- Alabama Street and Palmetto Avenue
Alabama Street and Lugonia Avenue
California Street and Lugonia Avenue
- (2) Secondary intersections:
- San Bernardino Avenue and Mountain View Avenue (southeast corner)
San Bernardino Avenue and Nevada Street
San Bernardino Avenue at Tennessee Freeway (State Route 30)
Mountain View Avenue at Interstate 10 (northeast corner)
Redlands Boulevard and Anderson Street
Redlands Boulevard and California Street
Redlands Boulevard and Alabama Street
Barton Road and California Street (northeast corner)
Barton Road and Alabama Street (northwest and northeast corners)

- (b) Building setbacks from intersections shall be defined by a line in a horizontal plane, taken at a forty-five (45) degree angle, connecting the property lines. On primary intersections, this line shall be drawn 50 feet from the intersection of the property lines or prolongation of such lines; on secondary intersections, 35 feet.

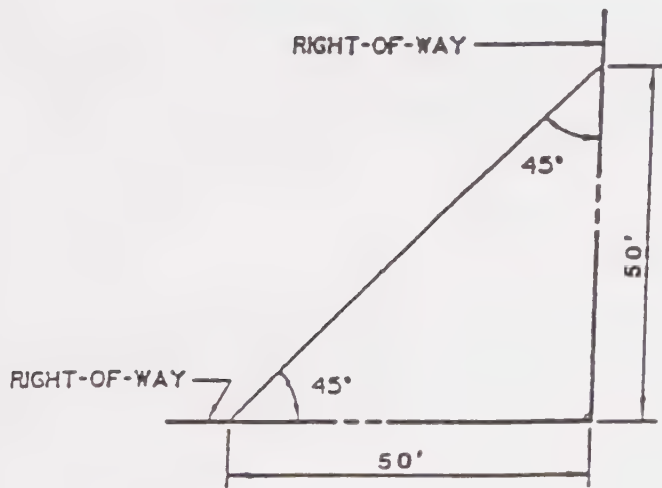
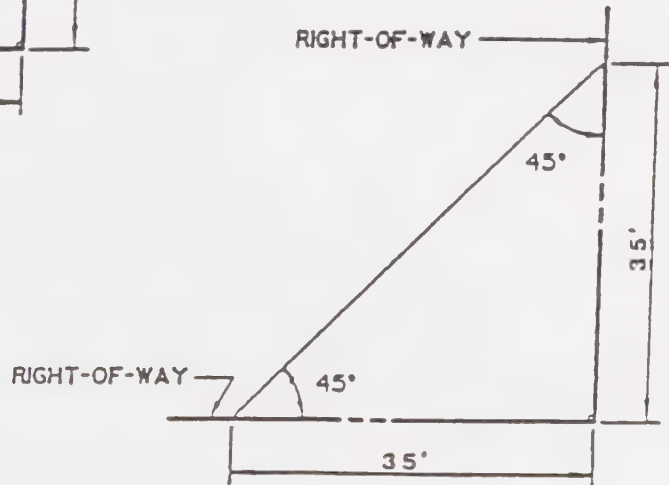
PRIMARY INTERSECTION**SECONDARY INTERSECTION**

FIGURE 4-15
SETBACKS AT
SPECIAL LANDSCAPED INTERSECTIONS

- (c) A clear sight area shall be established at all intersections of public or private streets within the planning area. This area shall be defined by a line in a horizontal plane, taken at a forty-five (45) degree angle, connecting two points twenty-five (25) feet from the intersection of property lines or the prolongation of such lines. The maximum height of visual barriers, including but not limited to signs, vegetation, fences and walls, shall not exceed thirty-six (36) inches above the top of the curb or forty-four (44) inches above the surface of the street.

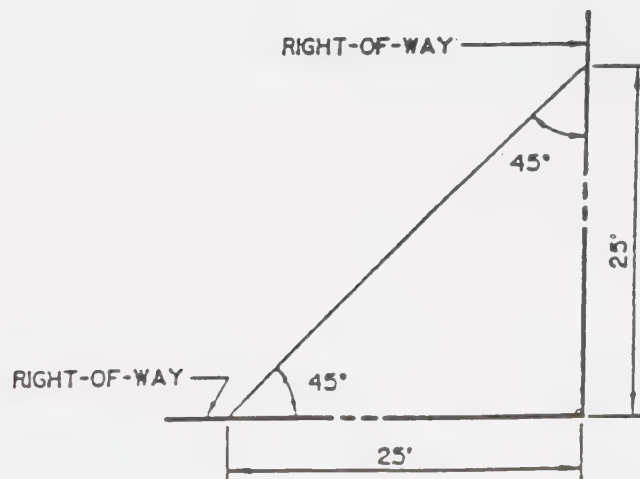


FIGURE 4- 16

SETBACK FOR CLEAR SIGHT TRIANGLE

Section EV4.0130 Planting and Design Concepts for Special Landscaped Intersections

- (a) The design of enhanced corner treatments at key intersections will vary between primary and secondary classifications, but will be developed to retain a similar character which will further establish a sense of continuity throughout the planning area. The design of these corner treatments shall include a combination of masonry walls, ballards, enriched paving, and plant materials which will coordinate with the proposed streetscape planting, yet create a specific focal element.
- (b) The dominant plant materials of Special Landscaped Intersection shall be Washingtonia Robusta Palms along with a flowering accent tree to provide human scale and color; shrub or groundcover planting and/or flowering groundcover.
- (c) Conceptual drawings of how Primary and Secondary Intersections might be constructed are shown on Figures 4-17 and 4-18 respectively. The actual configuration of each designated intersection may differ slightly to provide for integration into the adjacent site design; provided, however, that the primary plant and building materials and design concepts as contained in this Section are adhered to in the intersection design.

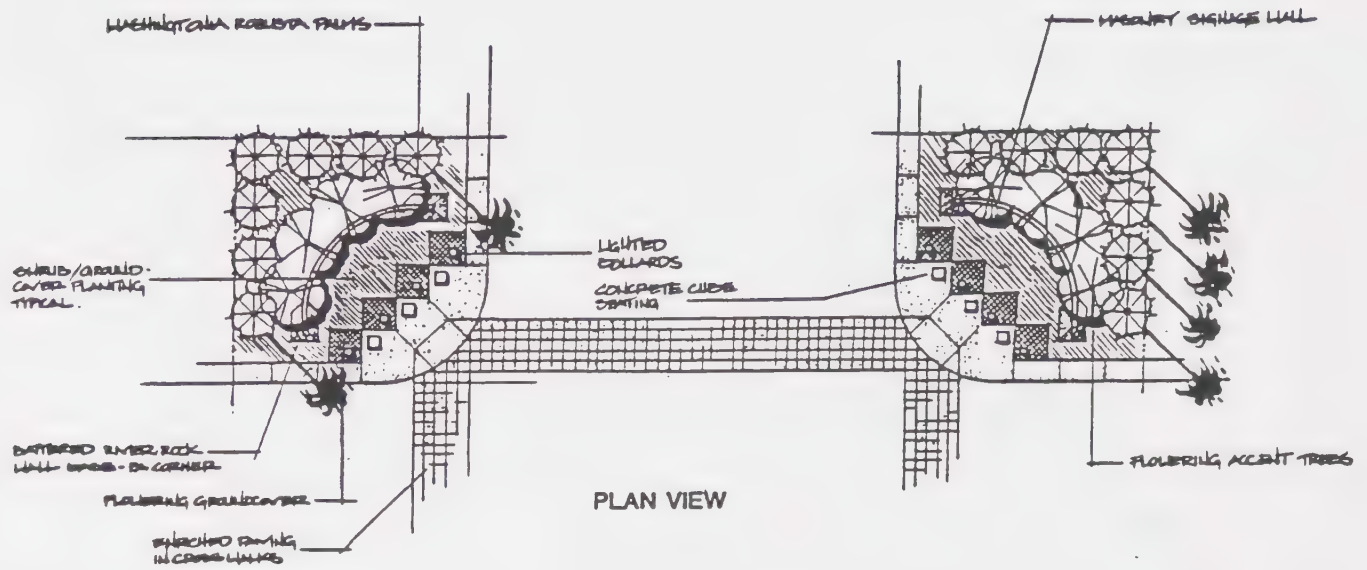


FIGURE 4-17

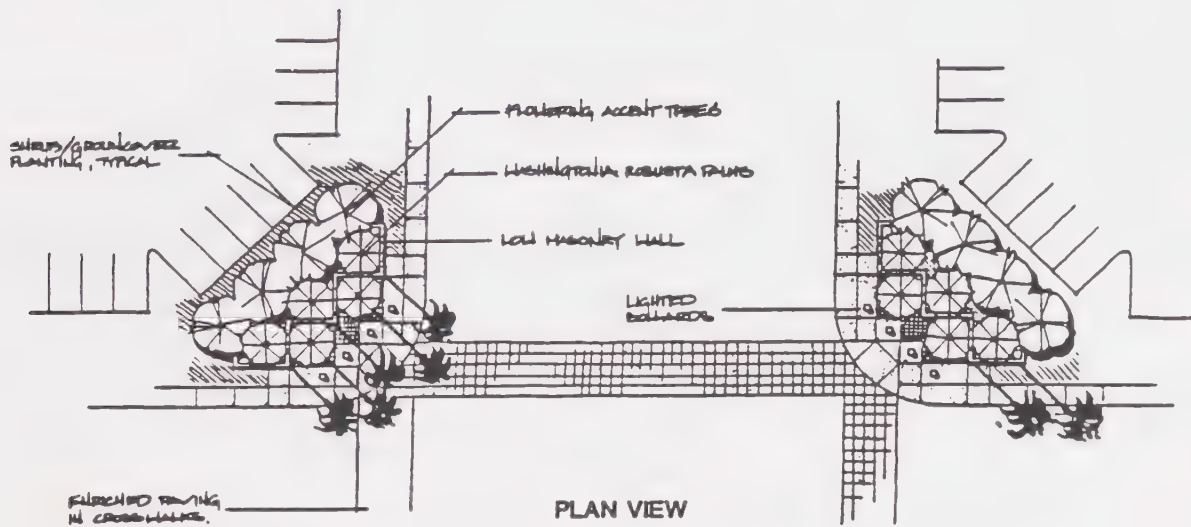


FIGURE 4-18

Section EV4.0135 Maintenance of Special Landscaping

- (a) Installation and maintenance of palm rows and public right-of-way along Special Landscaped Streets, and installation and maintenance of Special Landscaped Intersections shall be the responsibility of a Landscape Maintenance District to be formed for that purpose by the governing agencies.
- (b) Landscape easements may be required by the governing agency over privately-owned property adjacent to special landscaped streets and intersections where the agency determines that installation and/or maintenance of landscape improvements on that property will be undertaken by the Landscape Maintenance District.

Section EV4.0140 Landscape Concepts for Freeways

- (a) Planting guidelines along the freeways shall be consistent with other landscape guidelines established for the Specific Plan area in order to enhance the continuity of landscape design and improve freeway views from both on and off the roadway.
- (b) Required setbacks adjacent to freeways shall be established as follows:
 - (1) A minimum 25 feet of landscaped area shall be established adjacent to all freeway rights-of-way.
 - (2) Within the Special Development District, this landscaped area may be reduced to 15 feet in width if approved by the reviewing agency under the following conditions:
 - (A) The freeway is elevated, with steep slopes adjacent to the right-of-way.
 - (B) An additional 10 feet of landscaping shall be provided on-site so as to be visible from the freeway.
 - (C) A 25 foot building setback shall be maintained; parking may be permitted if enhanced with canopy-type trees.
 - (3) All buildings shall be setback an average of fifty (50) feet from all Caltrans property lines, unless the reviewing authority finds that such a setback would severely constrain the reasonable use of a parcel due to its configuration or location.

- (c) The plant palette for freeway landscaping shall include the following:

(1) Trees

Washingtonia Robusta, 10 foot trunk @ 40 feet on center.

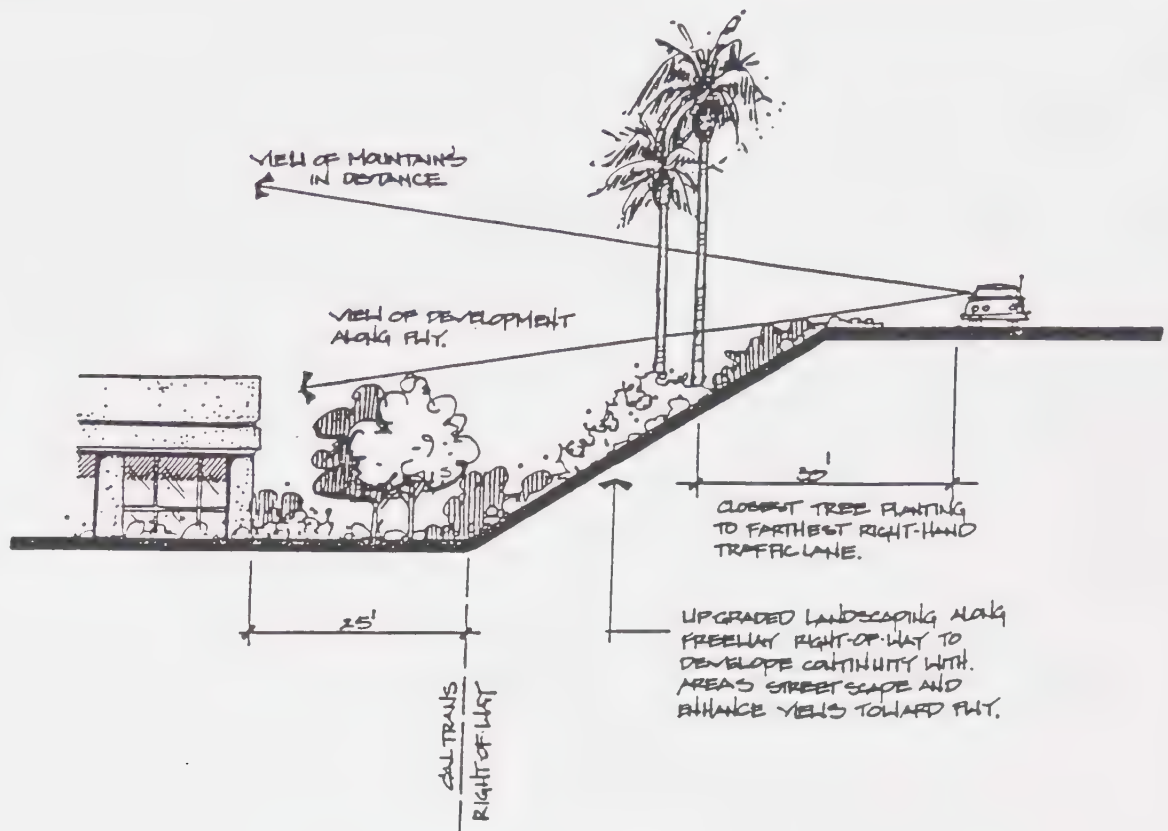
(2) Shrubs (all 1 gallon minimum @ 8 feet on center)

Dodonaea Viscosa
Leptospermum Scoparium
Nerium Oleander
Photinia Fraseri
Tecomaria Capensis
Raphiolepis Indica
Pyracantha Species

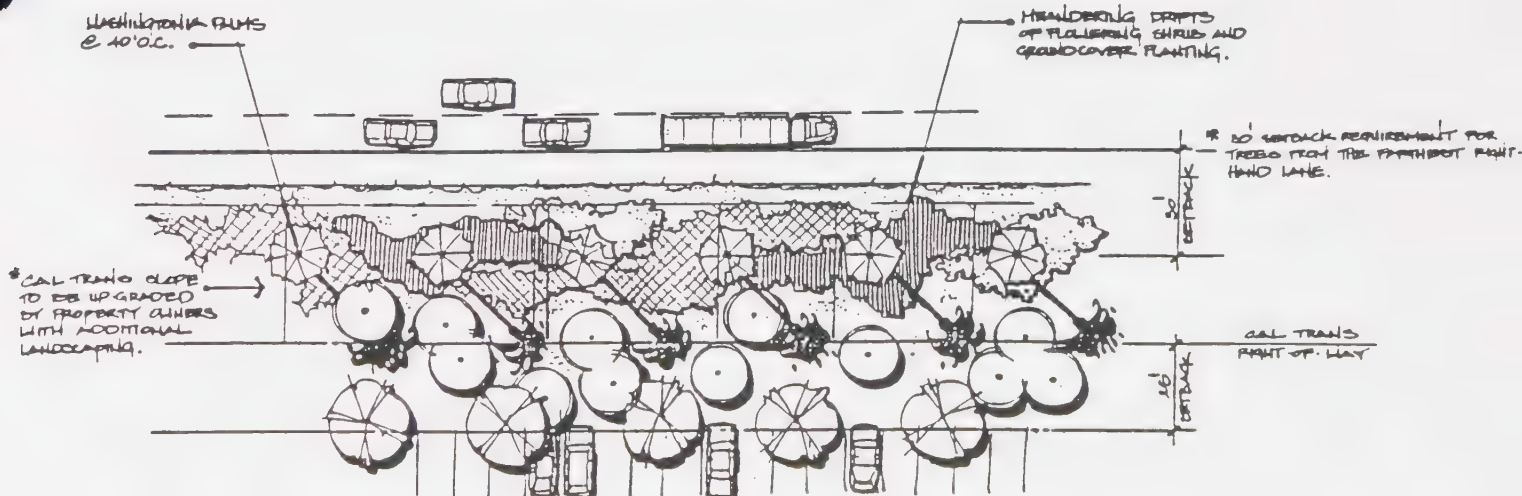
(3) Groundcover

Hedera Helix
Lantana Species

- (d) Within the Caltrans right-of-way, upgraded landscaping installed by property owners shall be coordinated with Caltrans. A 30 foot setback shall be maintained between the edge of the travel lane and any tree planting. The property owner shall bond for maintenance of the plant materials as required by Caltrans.
- (e) Conceptual renderings of freeway planting guidelines are shown in Figure 4-19.



FREEWAY EDGE SECTION



FREEWAY RIGHT-OF-WAY PLAN VIEW

FIGURE 4-19

Section EV4.0145 Pedestrian Circulation and Open Space

- (a) Sidewalks shall be required on all public streets within the planning area. Sidewalks shall be constructed of concrete, with a minimum clear width of five (5) feet. Any sidewalk constructed adjacent to curb shall be a minimum of six (6) feet wide. Any sidewalk constructed within two and one half (2 1/2) feet of back of curb shall join to back of curb. Sidewalk shall be three (3) feet away from curb face except at curb returns and bus stops.
- (b) Additional sidewalks may be required during the design review stage of development processing. The following design standards shall apply in the determination of sidewalk locations:
 - (1) The sidewalk system shall provide for a safe, continuous pedestrian circulation and access system to all parts of the development. Pedestrian access shall be provided from public streets and parking lots to building entries, and walkways provided on-site shall connect with those off-site.
 - (2) The sidewalk system shall connect to pedestrian trails through the open-space areas.
- (c) The following standards shall apply to meandering sidewalks:
 - (1) Radii for curved sidewalk shall be between 200 and 600 feet.
 - (2) All radii shall be staggered.
 - (3) Maximum sidewalk grade shall not exceed 8.33% regardless of street grade.
- (d) Curb cuts for handicapped access shall be provided on all roadways as required by State law.
- (e) Bus turnouts and bus shelters may be required during the design-review stage of development processing. These facilities shall be designed to maximize security features and shall be located in proximity to both traffic signals and pedestrian crosswalks, so as to provide for ease of ingress for buses and ease of access for pedestrians. Bus stops shall be a minimum of fifty (50) feet in length.

- (f) Building configuration and placement shall provide for pedestrian courtyards, plazas, or open spaces between and/or adjacent to buildings.
- (g) The design of pedestrian plazas or courtyards shall provide shaded seating areas with attractive landscaping and should include water features, public art, kiosks, and covered walkways.
- (h) Benches, light standards, trash receptacles, and other street furniture shall be provided in an attractive and comfortable setting and shall be designed to enhance the appearance and function of a site and open space areas.

Section EV4.0150 Trails System

- (a) There is an opportunity in the East Valley Corridor to establish a trail system which will link up with regional trail systems to provide for both an energy efficient alternative to the automobile, and for recreational use within the planning area.
- (b) Figure 4-20 illustrates the trail system proposed for the planning area. The proposed facilities include:
 - (1) Commuter bikeways which are parallel to major roads and provide the most direct route for the work trip.
 - (2) Recreational pedestrian paths and bikeways which may or may not be adjacent to a roadway, are generally located in open space or landscaped areas and serve to provide the local pedestrian and bicycle circulation network.
- (c) There shall be two classes of bikeways in the East Valley Corridor:
 - (1) Class I Bikeway (Bike Paths) - are facilities with exclusive rights-of-way, separated from other vehicular rights-of-way, with cross flows by motorists minimized, serving the exclusive use of bicycles and pedestrians.
 - (2) Class II Bikeway (Bike Paths) - are bicycle lanes for preferential use by bicycles established within the paved area of highways and designated by specific lines of demarcation between the areas reserved for bicycles and lanes to be occupied by motor vehicles.

- (d) The following standards shall apply to Class I Bikeways:
 - (1) Bicycle paths shall be two-way routes.
 - (2) The minimum paved width for a two-way bike path shall be 8 feet. A minimum 2-foot wide graded area shall be provided adjacent to the pavement. (See Figure 3-10)
 - (3) A minimum 2-foot horizontal clearance to obstructions shall be provided adjacent to the pavement.
 - (4) The vertical clearance to obstructions across the clear width of the path shall be a minimum of 8 feet.
 - (5) Bike paths closer than 5 feet from the edge of a highway shall include a physical divider such as fencing, berms, trees or shrubbery to prevent bicyclists from encroaching onto the highway.
- (e) The following standards shall apply to Class II Bikeways:
 - (1) Bike lanes shall be one-way facilities.
 - (2) Where required, bike lanes shall occupy the emergency parking lane along major arterials, major highways and secondary highways, with widths of 8 to 10 feet. Painted demarcation lines shall define the bicycle lane, with appropriate freestanding and pavement signs. (See street cross-sections under transportation standards.)
- (f) Bikeways shall be constructed in accordance with the California Highway Design Manual, Bikeway Planning and Design.
- (g) Drainage inlet grates, manhole covers, driveways, etc., on bikeways should be designed and installed in a manner that provides an adequate surface for bicyclists.
- (h) Uniform signs, markings, and traffic control devices are mandatory and shall conform to the requirements of State law.

EAST VALLEY CORRIDOR SPECIFIC PLAN

TRAIL SYSTEM

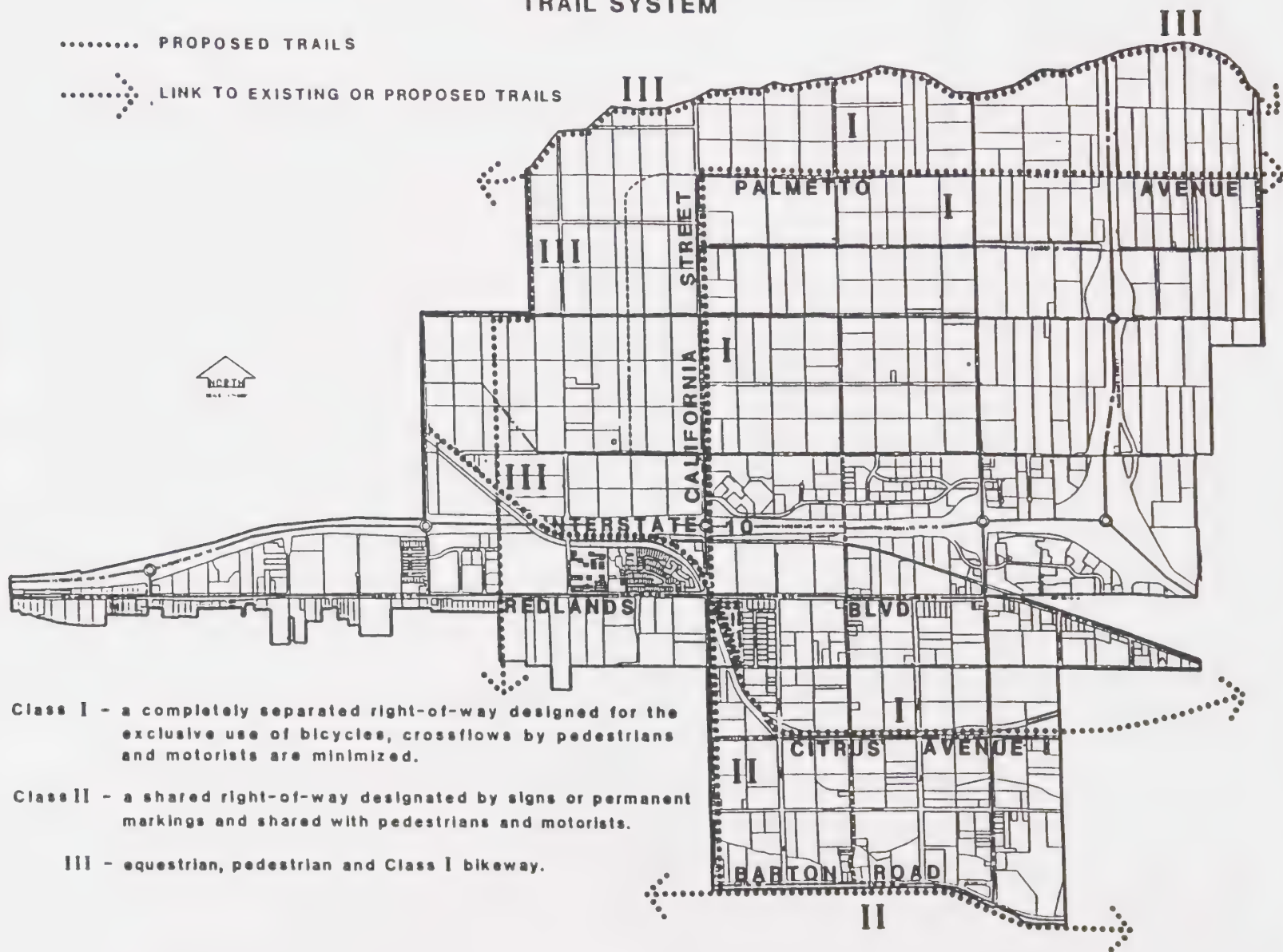


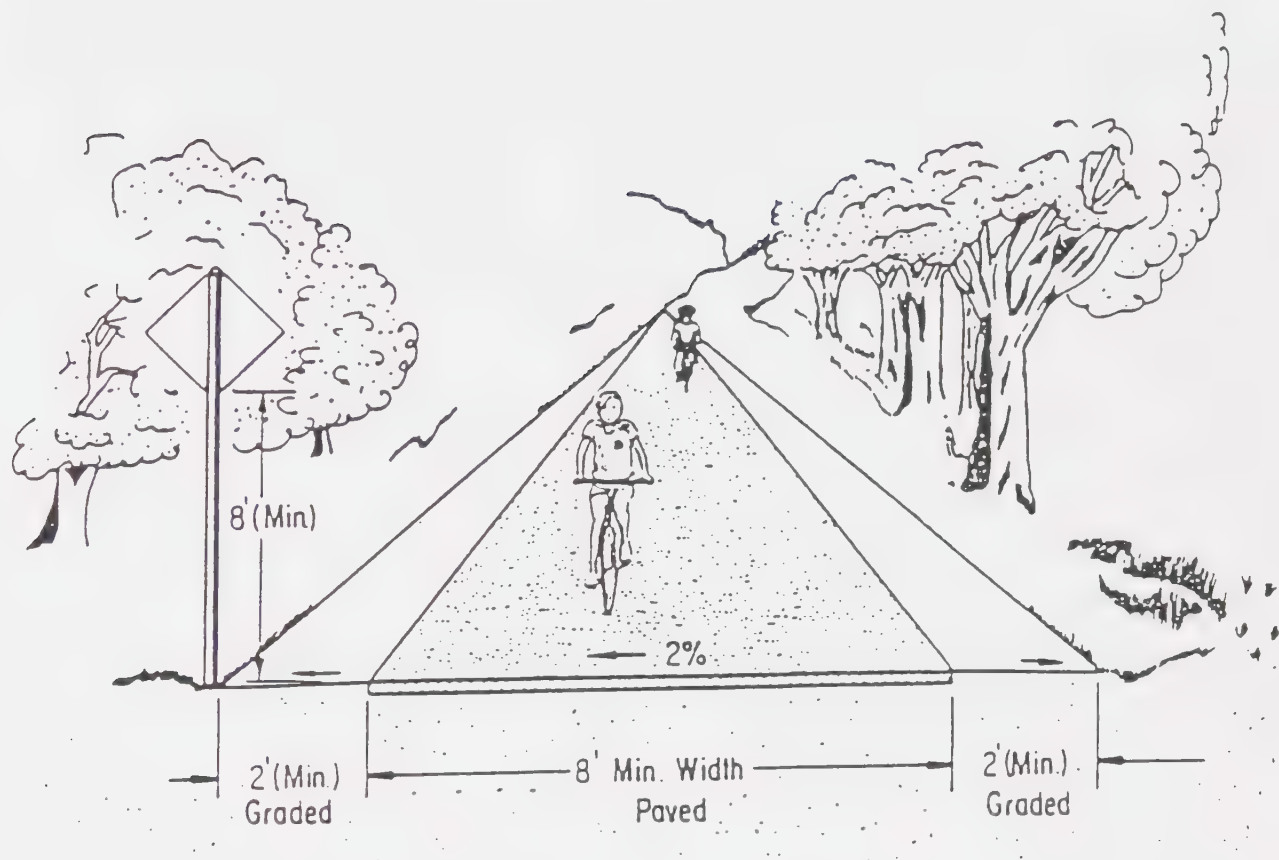
FIGURE 4-20

- (i) Pedestrian and bicycle pathways which are not associated with roadways shall be located to take advantage of attractive natural drainage areas whenever possible; landscaping and lighting shall be provided to create an attractive environment in the area of pedestrian and bike pathways to encourage their use.
- (j) All bike and pedestrian pathways shall have adequate lighting and signing to provide for the safety of the users.
- (k) At-grade trail crossings shall be provided for at signalized intersections wherever possible.
- (l) Bike storage facilities shall be provided in commercial and mixed use areas.

Section EV4.0155 Parks and Open Space

The specific demand on location of parks and open space can not be determined until the land uses established within the Special Development District have been determined. Implementation of park and open space provision, construction and maintenance shall be determined by the County of San Bernardino, the City of Redlands and the City of Loma Linda through implementation of ordinances and procedures adopted by each agency.

TWO-WAY BIKE PATH ON SEPARATED RIGHT-OF-WAY



TYPICAL CROSS SECTION BIKE PATH ALONG HIGHWAY

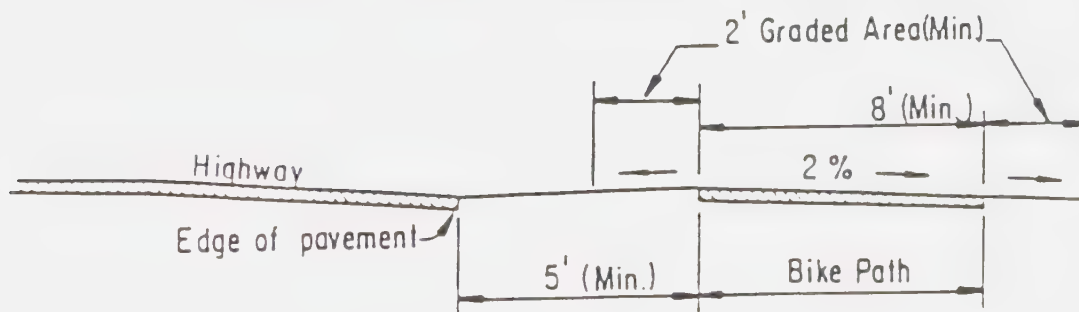


FIGURE 4-21

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CHAPTER 2. SITE DESIGN STANDARDS AND GUIDELINES**Section EV4.0201 Parking Requirements**

Adequate parking shall be provided on-site for each use within the East Valley Corridor in accordance with the following requirements:

<u>USE</u>	<u>PARKING REQUIREMENT</u>
<u>RESIDENTIAL</u>	
Single Family	2 garage spaces
Multiple Family: (a minimum of 1 space per unit to be covered)	
Studio	1 space/unit
One-bedroom	1.5 spaces/unit
Each additional bedroom	.5 space
Guest parking (designated & dispersed through development)	.25 spaces/bedroom or sleeping quarters

<u>COMMERCIAL USES</u>	
Neighborhood Center	1 space/200 sq. ft. of gross leasable area or 3 sq. ft. of parking area per 1 sq. ft. of gross area, whichever is larger
Hotels/motels	1.1 space/sleeping unit
Retail trade (includes Department Stores)	1 space/250 sq. ft. of sales area
Retail furniture/appliance	1 space/400 sq. ft. <u>and</u> 1 space/each 2 employees
Retail food and drink (with or without liquor and/or entertainment)	1 space/3 seats or 1 space/50 sq. ft. serving area, whichever is larger; and 1 space for each 2 employees; minimum of 10 spaces

Wholesale Trade	1 space/2 employees <u>and</u> 1 space for each company vehicle; <u>or</u> 1 space/1,000 sq. ft. of gross floor area, whichever is greater
Automobile & Machinery Sales	1 space/2,000 sq. ft. of open area devoted to display or sales; provided that where such area exceeds 10,000 sq. ft.,
Regional Shopping Center/Mall	To be specified by Planned Development

<u>BUSINESS SERVICES</u>	
Rail, bus, air terminals	1 space/3 seats in waiting area of terminal
Office, (Real Estate, Insurance, Advertising Legal, etc.)	1 space/250 sq. ft. of gross floor area; minimum of 4 spaces
Banks, Financial Institutions	1 space/200 sq. ft. of floor area; minimum of 4 spaces
Repair services	Up to 3,000 sq. ft.: minimum of 5 spaces; Over 3,000 sq. ft.: 5 spaces plus 1 additional space for each 800 sq. ft. in excess of 3,000 sq. ft.
Automobile repair	4 spaces/service bay; minimum of 6 spaces
Contract Construction	1 space/2 employees <u>and</u> 1 space for each company vehicle
Warehousing	1 space/500 sq. ft. of gross floor area up to 20,000 sq. ft. 1 space per 1000 sq. ft. over 20,000 sq. ft.

Automated Warehousing	1 space/1000 sq. ft. of gross floor area or space/each employee on the largest shift, whichever is larger (Note: Requirement may be reduced if applicant submits letter justifying reduction of spaces; however, adequate area for expansion of parking shall be provided in case of conversion of use)
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PROFESSIONAL SERVICES

Medical, Dental Offices	1 space/250 sq. ft.; minimum of 5 spaces per office
Hospitals	1 space/patient bed plus 1 space for every employee and staff member on largest shift
Convalescent hospitals/Nursing Homes	1 space/3 residents (use capacity as listed on license or permit) and staff members on largest shift
Veterinary Hospital	6 spaces minimum up to 1,000 sq. ft., plus 1 space/each 250 sq. ft. in excess of 1,000 sq. ft.

EDUCATIONAL SERVICES

Child Care	1 space/employee <u>and</u> 1 space/5 children; minimum of 4 spaces
Elementary School	5 spaces plus 1 for each classroom
High School	1 space/5 students plus 1 space/staff member and employee
College/University	1 space/3 enrolled day time students & 1 space/staff member and faculty personnel

Trade/Vocational/Business	1 space/3 student plus 1 space/staff member and faculty personnel
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<u>ENTERTAINMENT</u>	
Theater/Auditorium	1 space/5 fixed seats or 1 for every 40 sq. ft. of seating area where there are no fixed seats. Also space for each 250 sq. ft. of floor area not used for seating
Skating Rinks/Dance Halls and Skating Rinks	1 space/3 fixed seats and for every 20 sq. ft. of seating area where there are no fixed seats and 1 space for each 250 sq. ft. of skating area 24 linear inches of bench shall be considered a fixed seat
Dance Hall	1 space/20 sq. ft. of dance floor area & 1 space/3 fixed seats and per 20 sq. ft. of seating where there are no fixed seats and 1 space for each 250 sq. ft. of skating area 24 linear inches of bench shall be considered a fixed seat.
Bowling Alleys	5 spaces/each bowling lane and 2 spaces/billiard table
Billiard Parlor	2 spaces/billiard table
Parks, Pool, etc.	1 space/8,000 sq. ft. of active recreative area within a park or playground and 1 space/acre of passive recreational area within a park or playground.
Golf Course	10 spaces for each hole and 1 space for each 35 sq. ft. of building space/250 sq. ft. of building floor area for other commercial uses.
Amusement Enterprises	1 space/4 persons using facilities

Organized Camp	1.5 spaces/staff member or employee
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<u>MISCELLANEOUS</u>	
Church	1 space/3 fixed seats or 1 space/40 sq. ft. of floor space designated for assembly purposes
Private Clubs/Lodges	1 space for each 50 sq. ft. for floor
Chapels/Mortuaries	1 space/5 fixed seats of all area used for assembly or 1 space/40 sq. ft. of assembly area. Also, space per vehicle used in connection to the use.
Manufacturing	1 space/500 sq. ft. of floor area or 1 space/employee on the largest shift, whichever is greater.
Government Buildings (public use)	1 space/250 sq. ft.
Government Building (little public use)	1 space/250 sq. ft. of floor space or 1 space per employee

Section EV4.0205 Parking Standards

- (a) The required parking spaces shall be located on the same site with the main use or building. Property within the ultimate right-of-way of a street or highway shall not be used to provide required parking or loading facilities.
- (b) On-site parking shall be restricted to those areas which are paved and designated for vehicle parking.
- (c) When the occupancy or use of any premises is changed to a different use, parking to meet the requirements of Section EV4.0201 shall be provided for the new use or occupancy.
- (d) When the occupancy or use of any premise is altered, enlarged, expanded or intensified, additional parking to meet the requirements of Section EV4.0201 shall be provided for the additional area and/or use.

- (e) Where two or more uses are located in a single building or a single premise, required parking shall be provided for each specific use.
- (f) No required parking space or loading area shall be discontinued, reduced or altered in any manner below the requirements established in this Division unless alternative parking is provided.
- (g) Shared parking may be approved by the governing agency, provided that time of operation of the involved businesses are not the same, under the following conditions:
 - (1) Up to 50% of the parking facilities required by this Section for a use considered to be primarily a daytime use may be provided by a use considered to be primarily a night time use; up to 50% of the parking facilities required by this Section for a use considered to be primarily night time use may be provided by a use considered to be primarily a daytime use, provided that such reciprocal parking area shall be subject to conditions as set forth in paragraph (3) below.
 - (2) The following uses are typical daytime uses: Banks, business and professional offices, retail stores, personal service shops, clothing or shoe repair or service shops, and similar uses. The following uses are typical of night time and/or Sunday uses: auditoriums, fraternal lodges, churches, and theaters.
 - (3) Conditions required for joint use:
 - (A) A building or use for which application is being made for authority to utilize the existing off-street parking facilities provided by another building or use, shall be located within one hundred fifty feet of such parking facilities.
 - (B) The applicant shall show that there is no substantial conflict in the principal operating hours for the buildings or uses for which the joint use of off-street parking facilities is proposed.
 - (C) Parties concerned in the joint use of off-street parking facilities shall evidence agreement for such joint use by a proper legal instrument approved by the City Attorney as to form and content.

- (h) Each off-street parking space shall have dimensions not less than nine (9) feet in width and nineteen (19) feet in length, except parallel parking stalls which shall be a minimum of eight (8) feet in width and twenty-four (24) feet in length. No part of the area of a required parking space shall be used for driveways, aisles, walkways, or other required improvements. Stall depths may be reduced up to one (1) foot where the parking space is adjacent to a six (6) foot or wider sidewalk or adjacent to a landscaped planter with an interior diameter of five feet or more.
- (i) Handicapped parking shall be provided in accordance with the requirements of State law.
- (j) Individual parking stalls shall be legibly marked off on the pavement. Arrows painted on paving shall dictate direction of traffic flow. The parking area shall be designed so that a car entering the parking area shall not be required to enter a street to move from one location to any other location within the parking area or premises.
- (k) Entryways to parking areas shall be well-defined and recognizable with adequate lighting and signage provided to facilitate traffic flow.
- (l) Parking and maneuvering areas shall be so arranged that any vehicle entering the public right-of-way can do so traveling in a forward direction.
- (m) Minimum aisle widths for two-way traffic: For two-way traffic, aisle width and maneuvering areas shall be a minimum of twenty-six (26) feet in width.
- (n) Minimum aisle widths for one way traffic:

<u>Parking Angle</u>	<u>Aisle Width</u>
0	13 feet
45	14 feet
60	17 feet
90	26 feet

- (o) The required off-street parking and loading areas and access drives shall be surfaced per specifications of the governing jurisdictions.
- (p) Head in parking which would necessitate full frontage access to the street or highway shall not be permitted.

- (q) Parking areas shall be designed to facilitate sweeping and reduce trash buildup; parking bumpers shall be prohibited.
- (r) Visitor parking areas shall be provided near visitor entrances. Where appropriate, visitor drop-off zones shall be provided near visitor entrances.
- (s) Pedestrian walkways shall be provided to connect parking areas to destination points. Walkways shall be paved, lighted, and have adequate signage to direct pedestrian traffic.
- (t) Parking structures shall be permitted within the plan area; exterior design shall be architecturally compatible with main building. Parking structure should merge with or extend from main building rather than be an isolated structure. Autos should be screened to a height of 3'6" to 4' on each level, and the space remaining above the screening element, up to the ceiling of the next floor, shall remain open and unobstructed. Facades should be multi-textured or have other architectural relief.
- (u) The provision of compact parking is permitted in accordance with the criteria and specifications of the San Bernardino County Development Code.

Section EV4.0210 Loading Areas

- (a) All hospitals, institutions, hotels, commercial and industrial uses shall provide loading spaces not less than ten (10) feet in width, twenty (20) feet in length and fourteen (14) feet in height as follows:

Square Feet of Building Space (Gross Floor Area)	Loading Spaces Required
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Commercial Buildings

3,000	-	15,000	1
15,001	-	45,000	2
45,001	-	75,000	3
75,001	-	105,000	4
105,001	-	and over	5

Industrial Buildings

3,500	-	40,000	1
40,001	-	80,000	2
80,001	-	120,000	3
120,001	-	160,000	4
160,001	-	and over	5

Hospitals & Institutions

3,000	-	20,000	1
20,001	-	50,000	2
50,001	-	80,000	3
80,001	-	110,000	4
110,001	-	and over	5

Hotels & Office Buildings

3,000	-	50,000	1
50,001	-	100,000	2
100,001	-	and over	3

- (b) All loading facilities and maneuvering areas shall be located on-site with the use.
- (c) Sites shall be designed so that parking areas are separate from loading areas.
- (d) Adequate space shall be provided for stacking of vehicles waiting to load or unload, out of the public right-of-way and parking areas.
- (e) Backing of trucks from public right-of-way onto site for loading shall be allowed only at the ends of cul-de-sac streets.
- (f) No loading facilities shall be located at the front of the structure; loading facilities shall be permitted only in the rear and interior side yard areas.
- (g) Aisle width to loading docks shall be a minimum of fifty (50) feet width exclusive of truck parking area.
- (h) Loading facilities shall be adequately screened from the public view by use of walling, landscaping or building design.

- (i) Minimum aisle width adjacent to loading areas shall be sixteen (16) feet one way and twenty-six (26) feet for two way.
- (j) On structures within view of freeways, loading areas should be oriented away from public view from the freeway and from oncoming traffic along freeways. For example, structures located on the south side of Interstate 10 should have loading areas located on the east side of the building.
- (k) Loading area shall be designed as an integral part of the building's architecture.
- (l) Concrete pads shall be required at all loading bays.

Section EV4.0215 Site Lighting

- (a) Lighting shall be required on all new development for the purpose of providing illumination to ensure public safety and security. Lighting fixtures shall be functional, coordinated and visually attractive. Lighting shall be required at the following locations:
 - (1) Pedestrian walkways and plazas.
 - (2) Building entries, driveway entries and parking
 - (3) Hazardous locations, such as changes of grade and stairways, shall be well-lit with lower-level supplemental lighting or additional overhead units.
- (b) Lights shall be placed so as not to cause glare or excessive light spillage on neighboring sites.
- (c) All parking lot and driveway lighting shall provide uniform illumination at a minimum level of 0.5 foot candle.
- (d) All light fixtures are to be concealed source fixtures except for pedestrian-oriented accent lights.
- (e) Security lighting fixtures are not to project above the fences or roof line of the building and are to be shielded. The shields shall be painted to match the surface to which they are attached. Security lighting fixtures are not to be substituted for parking lot or walkway lighting fixtures and are restricted to lighting only loading and storage locations, or other similar service areas.

- (f) Exterior wall-mounted floodlights are expressly prohibited except for security lighting in areas as noted above.
- (g) All illuminated signs are to be internally illuminated.
- (h) Lighting of building faces is permitted.
- (i) The design of all lighting fixtures and their structural support shall be architecturally compatible with the surrounding buildings.
- (j) Walkway lighting fixtures shall have an overall height not to exceed twelve (12) feet.
- (k) Parking lot fixtures shall have an overall height not to exceed thirty (30) feet.
- (l) When walkway lighting is provided primarily by low fixtures, there shall be sufficient peripheral lighting to illuminate the immediate surroundings to ensure public safety. Shatter-proof coverings are recommended on low-level fixtures.

Section EV4.0220 Site Utilities

- (a) Utility easements shall be required as needed through the development review process.
- (b) All existing and new utilities of 12KV or less within the project and along adjacent major arterials shall be installed underground. Where possible, all overhead lines greater than 12KV shall be placed along the rear property line, away from arterial highways.
- (c) All ground-mounted utility appurtenances, including but not limited to telephone pedestals, utility meters, irrigation system back-flow preventors, and transformers, shall be located behind the building setback line where possible, and shall be adequately screened through the use or combination of concrete or masonry walls, berming, and landscape materials.
- (d) All new development shall be required to install all necessary equipment for use of non-potable water as a condition of occupancy of on-site structures in accordance with the City's master-planned non-potable water system. "Necessary equipment" shall be as determined by the City of Redlands, and may include pipes, pumps, storage, and other facilities, including "backbone" or "distribution" lines.

Section EV4.0225 Compatibility Standards

- (a) Where a Special Development area abuts a residential district, an orderly transition of uses and building types should be established as follows:
 - (1) There should not be a drastic and abrupt building scale change; the transition from residential to more intensive building types should be gradual, in order to prevent massive structures from dominating and intruding upon neighborhoods. Smaller buildings should be located near the residential area, with the largest buildings farther away.
 - (2) Land uses should transition gradually from residential to more intensive uses. In placing uses within these transitional areas, consideration should be given to traffic generation, truck traffic, hours of operation, noise, light and glare, and other characteristics which might impact adjacent residential neighborhoods.
 - (3) Special consideration will be given to the Planned Development Envelope immediately west of the existing length of Karon Street between Lugonia Avenue and San Bernardino Avenue in providing for uses and building types compatible with the existing single family residential development to the east. Planned development in this area may include all uses permitted within the SD district except for those uses within the Commercial Industrial District and may also include single family residential uses to ensure maximum compatibility with a minimum disruption to the existing residential neighborhood.
- (b) Every use of land or building shall operate in conformity with the following performance standards:
 - (1) Vibrations: Every use shall be so operated that maximum ground vibration generated is not perceptible without instruments at any point in the boundary of the district in which the use is located.
 - (2) Noise: Every use shall be so operated that the maximum volume of sound or noise generated does not exceed sixty-five (65) decibels from 7:00 a.m. to 10:00 p.m. and forty-five (45) decibels from 10:00 p.m. to 7:00 a.m. in areas which abut residential land uses. Measurement of maximum sound or noise volume can be taken at any point on the lot line of the lot on which the use is located.

- (3) Odor: Every use shall be so operated that no offensive or objectionable odor is perceptible at any point on the boundary of the district in which the use is located.
 - (4) Smoke: Every use shall be so operated that no smoke from any source shall be emitted of a greater density described in No. 2 on the Ringelmann Chart as published by the United States Bureau of Mines.
 - (5) Toxic Gases: Every use shall be so operated that there is no emission of toxic, noxious or corrosive fumes of gases.
 - (6) Emissions: Every use shall be so operated that there is no emission of dirt, dust, fly ash, and other forms of particulate matter.
 - (7) Radiation: Every use shall be so operated that there is no dangerous amount of radioactive emissions.
 - (8) Glare and Heat: Any operation producing intense glare or heat shall be conducted in a manner as to effectively screen the glare from view at any point on the lot line of the lot in which the use is located and to dissipate the heat so that it is not perceptible without instruments at any point on the lot line of the lot on which the use is located.
 - (9) Hazardous Materials: Every use shall be consistent with the provisions of the San Bernardino County Hazardous Waste Management Plan.
- (c) Where Neighborhood Commercial or Administrative/ Professional districts or uses abut residential districts or residential portions of Planned Developments, setbacks and buffering shall be established as follows:
- (1) Adjacent to residential parcel:
 - (A) No building proposed for neighborhood commercial or professional office use shall be constructed less than forty (40) feet from any adjoining property recommended for residential land use in the Specific Plan or Planned Development.

- (B) A continuous visual screen of a minimum width of ten (10) feet shall be maintained adjacent to all interior property lines which abut residential lots. Screening may be provided by means of fences, decorative masonry walls, berms, changes in elevation, and/or plant materials. Where such screening has been provided on the residential side of the property line, this requirement may be reduced or waived by the reviewing agency.

(2) Adjacent to residential street:

Buildings shall be at least forty (40) feet from the ultimate right-of-way line along any street abutting a residential area, with the exception that structures of less than twenty (20) feet in height may encroach into the required setback area no more than fifteen (15) feet and may cover no more than fifty (50) percent of the required setback area.

- (d) Where General Commercial or Industrial uses or districts abut residential districts or residential portions of Planned Developments, setbacks and buffering shall be established as follows:

(1) Adjacent to residential parcel:

No building proposed for commercial/industrial use shall be constructed less than forty (40) feet from any adjoining property recommended for residential land use in the Specific Plan or Planned Development.

(2) Adjacent to residential street:

Buildings shall be at least forty (40) feet from the ultimate right-of-way line along any street abutting a residential area, with the exception that structures of less than twenty (20) feet in height may encroach into the required setback area no more than fifteen (15) feet and may cover no more than fifty (50) percent of the required setback area.

- (3) No building shall be constructed to a height greater than its distance from any adjoining property recommended for residential land use on the Specific Plan or Planned Development, unless the

reviewing agency finds that approval of a waiver of this requirement will not adversely affect adjacent property. In no case shall industrial or commercial structures be so tall as to block natural sunlight from adjacent residential yards.

- (4) A landscaped area not less than thirty-five (35) feet in width shall be provided between a commercial or industrial structure and a residential district. Within this landscaped area a continuous visual screen of a minimum width of ten (10) feet shall be maintained adjacent to all interior property lines which abut residential lots. Screening may be provided by means of fences, decorative masonry walls, berms, changes in elevation, and/or plant materials. Where such screening has been provided on the residential side of the property line, this requirement may be reduced or waived by the reviewing agency.
- (e) Where Science Research Park uses abut residential districts, setbacks and buffering shall be established as follows:
 - (1) Adjacent to residential parcel:

No building proposed for business/industrial use shall be constructed less than fifty (50) feet from any adjoining property recommended for residential land use.
 - (2) Adjacent to residential street:

Buildings shall be at least fifty (50) feet from the ultimate right-of-way line along any abutting a residential area.
 - (3) No building or structure shall exceed twenty-five (25) feet in height, as measured from top of curb, located within one hundred (150) feet of a residentially designated area, or thirty-five (35) feet in height if located more than one hundred and fifty (150) feet but less than three hundred (300) feet from a residentially designated area.
 - (4) A landscaped area not less than thirty-five (35) feet in width shall be provided between any structure and a residential district. Within this landscaped area a continuous visual screen of a minimum width of ten (10) feet shall be maintained adjacent to all interior

property lines which abut residential lots. Screening may be provided by means of fences, decorative masonry walls, berms, changes in elevation, and/or plant materials. Where such screening has been provided on the residential side of the property line, this requirement may be reduced or waived by the reviewing agency.

- (f) Outdoor storage areas, loading areas or refuse collection facilities shall be located no less than sixty (60) feet from any adjoining property zoned or used for residential land uses. Any materials stored adjacent to residential areas shall be totally screened by the wall or landscape screen provided.
- (g) Additional landscaping, block walls, or increased setbacks may be required through the development review process to ensure land use compatibility.
- (h) An acoustical analysis shall be required for new single or multiple family residential development proposed adjacent to freeways, highways, arterials, rail lines, and under flight paths. The analysis shall indicate the existing and proposed CNEL's (Community Noise Equivalency Levels) on the site, and the method(s) by which the noise is to be controlled or reduced to no more than 65 dB within the exterior living space, and 45 dB within the interior living space of the project.

Section EV4.0230 Refuse Areas

- (a) All waste materials shall be stored in an enclosed area and shall be accessible to service vehicles. Wastes which might cause fumes or dust, or which constitute a fire hazard, or which may be edible by, or otherwise be attractive to, rodents or insects shall be stored only in closed containers in required enclosures.
- (b) A six (6) foot high masonry wall shall be constructed around all refuse collection areas. Trash enclosures shall have solid wood or metal doors.
- (c) Refuse collection areas shall not be constructed between the frontage street and the building line, or adjacent to or visible from freeways.

Section EV4.0231 Outdoor Sales

- (a) All uses shall be conducted within a completely enclosed building, except as follows:
 - (1) Off-street parking and loading areas
 - (2) Automobile service stations
 - (3) New and used auto sales
 - (4) Plants and vegetation associated with nurseries
 - (5) Open storage of materials and products and equipment when such storage is enclosed by a fence, wall, building, or other means adequate to conceal such storage from view from adjoining property or the public street
 - (6) Restaurant - Outdoor dining area

Section EV4.0235 Screening, Fences and Walls

- (a) All loading areas, mechanical equipment, outside storage, refuse areas, or other uses as determined by the reviewing agency shall be screened if located within seventy (70) feet of a front property line.
- (b) Any fence or wall that is constructed on a lot that contains an on-site slope shall be constructed at the top of the uphill side of such a slope.
- (c) No fence or wall and no landscaping which obstructs visibility shall be permitted within the corner cut-off areas defined in Section EV4.0120(c).
- (d) A six (6) foot high fence or wall shall be constructed along the perimeter of all areas considered by the reviewing agency to be dangerous to public health and safety. A six (6) foot high solid fence or wall shall be constructed around all open storage areas.
- (e) Open fences not to exceed four (4) feet in height shall be permitted within a required front yard area. For purposes of this section an open fence shall mean those types that are composed of wire mesh or wrought iron capable of admitting at least 90 percent of light.

- (f) Solid fences and walls not to exceed six (6) feet in height shall be permitted along side and rear property lines except that no solid fence or wall exceeding three (3) feet in height shall be located within any required front yard area.
- (g) Open fences as defined in paragraph (e) of this section that are over six (6) feet in height may be located in the rear half of the lot subject to a finding by the reviewing agency that such a fence will not constitute a nuisance to abutting property owners. Such fences up to sixteen (16) feet in height located within the buildable rear yard area of a lot and not less than ten (10) feet from any property line are exempt from the requirement.
- (h) All required screening from public view within the Industrial and Commercial Land Use designations or such uses within a Planned Development, such as storage spaces, loading docks, and equipment, shall be architecturally integrated with the surrounding building design through the use of concrete, masonry, or other similar materials. Solid walls within the buildable lot area shall not exceed a height of eight (8) feet from the highest finished grade. If the height of the wall is not sufficient, appropriate landscaping shall be required to screen the required areas from the freeway.
- (i) Fencing up to a height of six (6) feet may be permitted within any streetside setback area when there is a demonstrated need for security as determined by the reviewing agency. All security fences which are within the streetside setback shall be constructed of wrought iron or similar materials with respect to quality and durability, shall transmit 90% light, and shall not obstruct views of landscaping. No chain link or barbed wire is allowed. Security fencing shall not create a sight distance problem for motorists entering or exiting the site.

Section EV4.0240 Architectural Guidelines

- (a) Floor Area Ratios provide unique design flexibility in determining whether a low building covering most of a lot is beneficial or whether a taller building covering a small portion of the lot is appropriate. Maximum Floor Area Ratios (FAR) for any use within the Specific Plan area shall be established as follows: (NOTE: Floor Area Ratio is determined by dividing total gross leasable area in square feet by total lot area in square feet. For example, a 20,000 square foot building on a 40,000 square foot lot yields a Floor Area Ratio of .5).

- (1) Office buildings: .6 of the total lot area.
 - (2) Retail/Commercial buildings: .25 of the total lot area.
 - (3) Regional mall: .4 of the total lot area.
 - (4) Industrial buildings: .8 of the total lot area.
- (b) Floor Area Ratio Bonuses

The maximum floor area ratio may be increased as shown below. The total bonus shall not exceed fifty (50) percent of the permitted FAR. For example, an office building with a permitted FAR of .6 may be increased in floor area to a maximum FAR of .9 if several of the following amenities are provided. The permitted FAR bonus shall be determined by the reviewing jurisdiction, based upon its determination of the significance of amenities provided on the site.

- (1) Buildings providing structured parking: Bonus not to exceed twenty (20%) percent FAR.
- (2) Buildings providing amenity areas such as pedestrian arcades or plazas with significant visual features: Bonus not to exceed fifteen (15) percent of the permitted FAR. Any amenity area for which a bonus is granted must comply with the following criteria:
 - (A) The area must be in addition to that necessary to meet landscaping, park and setback requirements.
 - (B) Minimum size: The area must contain a minimum of 4,000 square feet.
 - (C) Location: All amenity areas must be adjacent to, and approximately level with, a public street. The difference in grade between the amenity area and the street shall not be more than three (3) feet although this requirement is not intended to prevent; mounding or terracing of landscaping within the amenity area.
 - (D) Visibility: The interior of the amenity area shall be visible from the street for security purposes.

- (E) Seating: One linear foot of bench or seating shall be provided for every 40 square foot of amenity area. Seating may be in the form of ledges.
 - (F) Sunlight patterns: The amenity area shall be able to receive direct sunlight on at least 30% of the surface area from 10 a.m. to 2 p.m. between the spring and fall equinox.
 - (G) Design and landscaping: At least one major element, such as artwork or water, shall be included in the amenity area. The dominant landscape elements shall be trees and turf. The amount of impervious surface should not exceed 40% of the amenity area unless unique design considerations are offered. Where artwork is used, minimum cost of public art shall be one (1%) percent of the overall cost of the project as stated on the building permit.
- (3) Additional landscaping, lakes, golf course or other open space amenities: Bonus not to exceed twenty (20) percent of the permitted FAR.
 - (4) Transportation management plan, including car and van pooling, flexible work scheduling, etc.: Bonus not to exceed fifteen (15) percent of the permitted FAR.
 - (5) Supportive uses within office and industrial buildings which provide services to employees, such as cafeterias, lounges, recreational areas, or child care facilities, may be determined to be exempt from maximum floor area ratio requirements. Determination of whether a proposed use qualifies for this exemption shall be made by the reviewing agency. This exemption may be granted only if the property owner enters into an agreement with the agency ensuring that such area remains in the exempt use.
- (c) The following guidelines shall apply to site design:
- (1) Developments should be designed to maximize any existing views of mountain ranges, open space, palm rows, or other view amenities.
 - (2) Building placement should vary to include both parallel and skewed angles to the street plane in order to provide diversity and discourage continuous building facades along street frontage.

(d) The following guidelines shall apply to building design:

- (1) Building construction and design shall be used to create a structure with equally attractive sides of high quality, rather than placing all emphasis on the front elevation of the structure.

Architectural facade treatments will be required on all portions of the building(s) exposed to public views. Extra treatment may be given to the street frontages as long as the basic facade treatments are carried around the structure.

- (2) Any accessory buildings and enclosures, whether attached to or detached from the main building, shall be of similar compatible design and materials as the main building.
- (3) Large, continuous surface treatments of a single material shall be minimized. Changes in texture, relief or materials, and use of decorative features such as planters, varied roof lines, decorative windows and accent panel treatment should be encouraged.
- (4) Pre-engineered metal buildings with corrugated exteriors are prohibited and other predominantly painted metal facade treatments are strongly discouraged.

(e) Multiple Residential Site Design Guidelines

- (1) Buildings shall be designed in discrete units, not in one massive structure, with a non-linear facade along the street frontage.
- (2) Sloping roofs of varying heights are encouraged.
- (3) Site design shall include covered, internal parking areas, internal courtyards, and multiple entry points.
- (4) Design elements shall include providing extensive open space and landscape buffering between buildings; variation in building elevations and configurations between buildings and variations in building heights; use of different building materials or combinations of different materials; and contrasting color schemes between projects.

- (5) Recreational facilities shall be located and/or designed so as not to create nuisance to surrounding units or to impact adjacent properties. Sufficient setbacks, landscaping and berming between recreation facilities and surrounding units shall be provided to minimize noise and visual conflicts.
 - (6) Roofing materials shall be concrete, tile or other imitation shake material.
- (f) Rooftop Treatment
- (1) Buildings shall be designed so that the architecture of the building adequately screens rooftop equipment from taller surrounding structures as well as residential uses by use of rooftop wells, parapet walls, or other means. Where possible, ground-mounted equipment shall be used in lieu of roof-mounted equipment.
 - (2) All roof mounted equipment, including but not limited to ducts, fans and vents, must be painted to match the roof color.
 - (3) Rooftop solar collectors, skylights and other potentially reflective elements shall be designed and installed so as to prevent glare and obstruction of views from surrounding uses and structures. If equipment projects above building mass, it shall be screened with an enclosure which is compatible with the building design.
 - (4) Rooftop radio, TV and microwave antennae and towers are prohibited unless approved by the Planning Commission.
 - (5) Where large, flat rooftops are located near taller surrounding structures, they shall be designed and landscaped to be visually attractive. The use of colored gravel (earthtones, arranged in patterns) and/or planter boxes is encouraged for this purpose.

Section EV4.0245 Landscaping Guidelines

(a) Intent

Landscaping is of primary importance to the establishment of the design character of the East Valley Corridor. The landscape guidelines are intended to promote the establishment of compatible and continuous landscape development to enhance and unify the East Valley Corridor. Specifically, the guidelines are intended to enhance and preserve the existing site character, to minimize the adverse visual and environmental

impacts of large buildings and paved areas, to promote the conservation of water, and to provide micro-climate control for energy conservation where possible.

Section EV4.0250 General Guidelines

- (a) The Landscape Plan required for submission by the applicant should exhibit a design concept. Plant materials should be used in a logical, orderly manner, helping to define spaces and complement adjacent architecture.
- (b) Landscape designs should be coordinated between the areas of a development. However, all areas within a project need not be identical. Different landscape themes may be utilized in larger developments to distinguish spaces from one another, yet these themes should be consistent with a unifying concept which establishes a cohesive design throughout the project.
- (c) In addition to the selection and distribution of plant materials, landscape plans should incorporate various site furnishings and features. Lighting, seating, paving, fountains, etc., should be considered integral components of the landscape plan and therefore included in the overall landscape concept.
- (d) The scale and character of the landscape materials to be selected should be appropriate to the site and/or architecture. Large-scale buildings or projects require large-scale landscaping treatments.
- (e) Existing landscaping elements, such as mature trees, should be incorporated into landscape plans. Specimen trees or groupings of existing trees can provide a new development with immediate character. They should be viewed as design determinants.
- (f) Landscaping incorporated into the building design through trellises, arbors, planters, atriums, etc., is encouraged and can often enhance the quality of a building.
- (g) The plant palette should be relatively limited and applied in groupings of similar species rather than a few plants of many different species planted together. The use of water conserving plantings, such as California natives and drought tolerant trees, shrubs and turfs is encouraged. A list of suggested drought resistant plant materials is included in Table 4-3.

- (h) Live plant materials should be used in all landscaped areas. The use of gravel, colored rock, bark and other similar materials are not acceptable as a sole ground cover material. (These materials may be used, however, in place of paving materials in functional activity areas such as patios or rear entry walks, or as groundcover for up to twenty percent (20%) of the total landscaped area).
- (i) New plant materials should be supplied in a variety of container sizes: for shrubs - five gallon sizes, and for trees - fifteen gallon containers, are preferred. The use of larger specimen trees is encouraged.
- (j) Irrigation is required for all landscaped areas. Automatic systems are required. Plants should be watered and maintained on a regular basis. Irrigation systems should be designed so as not to overspray walks, buildings, fences, etc. The use of water conserving systems such as drip irrigation or moisture sensors for shrubs and tree planting is encouraged.
- (k) Landscape installation, in accordance with the approved plan, must occur prior to building occupancy. Where a development occurs in phases, all landscaping for each phase must be installed prior to occupancy of that phase.

Section EV4.0251 Outdoor Sales

All uses shall be conducted within a completely enclosed building, except as follows:

- (1) Off-street parking and loading areas;
- (2) Automobile service stations;
- (3) New and used auto sales;
- (4) Plants and vegetation associated with nurseries;
- (5) Open storage of materials and products and equipment when such storage is enclosed by a fence, wall, building or other means adequate to conceal such storage from view from adjoining property or the public street;
- (6) Restaurant - Outdoor dining area

Section EV4.0255 Landscape Requirements for Parking Area

- (1) The following standards shall apply to parking areas adjacent to roadways or exposed to public view from freeways, roadways or adjacent parcels:
 - (A) Landscaped berms, or a combination of berms, landscaping and/or wall treatments of sufficient height to substantially screen parking areas, shall be provided between parking area and right-of-way.
 - (B) All double row parking spaces shall be separated by either a planter or planter boxes with an overall outside width of five (5) feet. Planters shall be enclosed by a six (6) inch continuous poured in place concrete curb. The curb shall be included in the measurement of the overall width of the planter.
 - (C) Trees with a trunk height of not less than six (6) feet shall be installed in the planters at each end of an aisle, at three (3) space intervals throughout the lot, and at twenty (20) foot intervals along the periphery of the lot. Within parking lot areas trees may be clustered in groups to achieve a more natural setting provided the total number of trees meets the previous planting requirements.
 - (D) At least fifty percent (50%) of the trees shall be an evergreen variety and shall be evenly distributed throughout the lot.
 - (E) Planter areas shall also contain ground cover and/or flowering shrubs. Drought tolerant planting is encouraged.
 - (F) Where automobile bumpers overhang landscaped planters, two (2) feet of clear area unobstructed by trees or shrubs shall be provided for overhang.
 - (G) In large parking lots, parking areas shall be broken up into sections containing no more than 200 vehicles, with landscaped buffer areas at least eight (8) feet in width established between sections.
 - (H) A landscaped island shall be provided for every twenty (20) parking spaces.
 - (I) Landscaped islands, interstall planters and peripheral landscaping together shall total at least seven (7) percent of the total parking lot area.

- (2) Where parking areas are located adjacent to residential districts, they shall be separated therefrom by a decorative solid masonry wall six (6) feet in height, provided said wall shall not exceed three (3) feet in height where it is in the front yard area of an abutting residential use or district
- (3) Where parking areas are completely screened from public view by building placement or a combination of walling and landscaped buffers, landscaping requirements within the parking lot may be reduced at the discretion of the reviewing agency.
- (4) Pedestrian walkways shall be provided within parking lots to destination points.
- (5) When a unified landscape plan is proposed for a project site in excess of ten (10) acres, that complies with the requirements of EV4.0260 the project site may be exempt from the requirements of EV4.0225(1) at the discretion of the reviewing agency.

Section EV4.0260 Other Site Landscaping Provisions

- (a) A minimum portion of the site shall be landscaped. No landscaped area having a width of less than five (5') feet shall be considered in the minimum landscaping requirement. This minimum landscaping requirement will be established as follows:

Industrial uses	15%
Commercial uses	20%
Science Research Park District Uses	20%
Residential uses	35%
- (b) In addition to required landscaping, landscaping may be provided in lieu of ten (10%) percent of the total number of parking spaces required, provided the landscaping is arranged such that parking may be installed at a later date if such a demand arises, and further provided, that the owner agrees to provide such parking at the request of the reviewing agency.
- (c) Variation of landscape coverage may be permitted for individual parcels within planned developments when the development as a whole meets the required coverage and the plan is consistent with the goals and policies of the Specific Plan.

- (d) The goals and policies of the Specific Plan provide for the creation of significant landscaped open space areas at the entry and exit points of the East Valley Corridor. The following requirements are intended to meet these objectives:
- (1) Special open space edge treatments shall be provided along Interstate 10 from Mountain View Avenue to California Street, and along State Route 30 from the Santa Ana River to San Bernardino Avenue.
 - (2) The open space edge treatments shall incorporate landscaping and associated design elements for areas visible from the freeway. These elements may include open lawn areas, canopy trees within parking areas, lakes, fountains, open stages and amphitheaters, art in public places, citrus groves, and similar open space areas.
 - (3) A building setback of 100-feet shall be maintained from the freeway right-of-way line within these special open space edge treatment areas, unless the reviewing authority finds that such a setback would severely constrain the reasonable use of a parcel due to its configuration or location, in which case alternative open space treatments may be determined appropriate.
 - (4) In creating this open space edge treatment, credit may be given towards, the minimum percent of landscaping required within the development, as specified in (c) of this Section.
- (e) The landscaped area requirement may be reduced by a maximum of five (5) percentage points where public art is to be displayed in a setting which enhances pedestrian spaces and building architecture. Minimum cost of public art shall be one (1%) percent of the overall cost of the project as stated on the building permit.
- (f) When the floor area, outdoor sales area, or covered storage area ("use") of any site developed prior to September 6, 1989 is increased ten percent or more, the minimum percentage of added landscaping on site shall be based on the following formula: $1.25 \times (\text{percent of use expansion}) \times (\text{landscape percentage from Section (a)}) \div 100$. All additions subsequent to September 6, 1989 shall be totalled in determining the ten percent calculation. The maximum landscape requirement shall not exceed that required in Section (a). When the use is increased cumulatively fifty percent or more after September 6, 1989, landscaping shall be provided as required by this division in Section (a).

- (g) As an alternative to providing the on-site landscaping required by this division, the Commission may require the applicant to fund the cost of installation and maintenance of off-site landscaping on nearby public property based upon the Commission finding that such off-site landscaping provides better aesthetic treatment for the developed site. The funding agreement shall be subject to review and approval of the Community Development Department Director and City Attorney.

Section EV4.0265 Planting Guidelines

- (a) **Parkways**

- (1) **General Provisions**

- (A) Existing parkways in the public right-of-way should be preserved and maintained. In areas where they are absent, a parkway (six to eight feet) should be established adjacent to the street curb.
 - (B) In addition to required street trees, all parkways should be planted with a low growing turf grass or ground cover which shall be maintained regularly so as not to impede pedestrian movement across it.
 - (C) Existing mature street trees in the parkways should be protected and maintained.

- (2) **Street Trees**

- (A) Required street trees on Special Landscaped Streets are to be consistent throughout the planning area. Existing parkway trees, other than the designated street tree, should be replaced over time with the designated street tree. For landscape concepts and required planting materials, on Special Landscaped Streets, see Section EV4.0125.
 - (B) Required street trees shall exhibit longevity, cleanliness, disease and insect resistance, and adaptability to local soils and climate. Suggested street trees are listed in Table EV4.1.

- (C) Street trees shall be planted not less than:
 - 25 feet back of beginning of curb returns at intersections.
 - 10 feet from lamp standards.
 - 10 feet from fire hydrants.
 - 10 feet from meters.
 - 10 feet from underground utilities.
- (D) Street trees shall have a minimum caliper of 1" trunk diameter measured 12" above the base and minimum container size of fifteen (15) gallon. Palm trees shall have a minimum brown trunk height of ten (10) feet.
- (E) Street trees in residential areas shall be planted as follows:
 - (I) Lot/unit on cul-de-sac -- 1 tree per street frontage.
 - (II) Interior lot/unit -- 2 trees per street frontage.
 - (III) Corner lot/unit -- 1 tree per 30 feet of street frontage or portion thereof.
- (F) In commercial and industrial areas, street trees shall be planted at the equivalent of one (1) tree per thirty (30') feet of frontage.

(3) Palm Tree Planting and Maintenance Guidelines

The following guidelines are provided to assist in new planting and transplanting of large palm trees in the planning area, including *Washingtonia robusta* (Mexican fan palm) and *Washingtonia filifera* (California fan palm).

- (A) Care should be taken in excavating, planting, or working near existing utilities or irrigation systems. Developer should check existing utility drawings and as-built plans for existing utility and irrigation locations.
- (B) New palms to be planted in the area should be grown under climatic conditions similar to the East Valley Corridor area. All palms selected for planting should be inspected for health, vigor, and overall form.

- (C) Planting of palms should not begin until May 1 nor after October 1.
- (D) Defronding and Tying:
 - (i) In preparing palm trees for relocation, all dead fronds should be removed and the entire trunk skinned clean to the height of the green fronds. Care should be taken to prevent injury to the trunk of the tree. Green fronds below a horizontal position shall be neatly cut off, leaving a 4" stub.
 - (ii) All remaining fronds above horizontal should be lifted up and tied together in two locations around the crown in an upright position. Due caution should be taken not to bind or injure the crown. A lightweight cotton rope or cord, not less than 1/4" diameter, should be used in tying up the fronds; wire should not be used. After tying, the tips of the fronds should be 'hedged-off' above the crown approximately 1/4 to 1/2 of the frond length. Defronding and tying work should be completed prior to digging the rootball.
- (E) Digging the Rootball:
 - (i) When digging out the rootball, no excavation should be done closer than 24" to the trunk at ground level and the excavation should extend below the major root system to a minimum depth of six (6) feet. The bottom of the rootball should be cut off square and perpendicular to the trunk below the major root system. Under no conditions should the contractor cut down the size of the rootball in width or depth.
 - (ii) Care should be taken not to free-fall, drag, roll or abuse the tree or put a strain on the crown at any time. A protective device should be used around the trunk of the tree while lifting and relocating so as not

to scar or skin the trunk in any way. This device should consist of either a rubber or leather sling made out of timbers sufficiently sized to withstand the cable/choker pressure. At no time should trees be balled out and laid on the ground with rootball left exposed to direct sunlight and air. The rootball should be kept moist and shaded at all times.

(iii) Palms should not be stockpiled for replanting.

(F) Planting of Palms

- (i) Excavation for planting should include the stripping and stacking of all acceptable topsoil encountered within the areas to be excavated for the tree holes.
- (ii) All excavated holes should have vertical sides with roughened surfaces and should be of a size that is twice the diameter and 24" minimum to 4' maximum deeper in the ground than they originally stood.
- (iii) Center palm in pit or trench; align with existing palms.
- (iv) Set palm plumb and hold rigidly in position until soil has been tamped firmly around ball or roots.
- (v) Palms should be backfilled with equal parts of specified backfill and native soil thoroughly mixed together.
- (vi) Root growth stimulant should be applied when the backfilling is between half to two-thirds up the rootball. Application rate should be one (1) quart for trees less than thirty (30) feet in height, two (2) quarts for trees thirty (30) feet and larger in height. Stimulant should be poured full strength equally distributed around the rootball, and water jetted into the backfill.

(G) Palm Backfill Soil

The import planting soil can consist of either fine sand or loamy sand textured soil and silt clay content of this soil shall not exceed 20% by weight with a minimum 95% passing the 2.0 millimeter sieve. The sodium absorption

ratio (SAR) should not exceed 6 and the electrical conductivity (ECe) of the saturation extract of this soil should exceed 3.0 milliosmol per centimeter at 25 centigrade. The boron content of this soil should be no greater than 1 PPM as measured on the saturation extract.

(H) Fertilizer

- (i) Root Growth Stimulant: Stimulant should be Vitamin B-1 as manufactured by Cal-liquid, Cooke, Chican, Ortho, or equivalent.
 - (ii) Fertilizer should not be used at time of planting. After 4 months use a light application of 20-10-5 approximately 1/2 lb. nitrogen per tree cultivated into the soil.
- (I) Tree irrigation should be monitored by use of irrometers, installed according to manufacturer's specifications, with two irrometers per tree.
- (J) Following planting work, all remaining excavation shall be backfilled and compacted. Burying of debris in holes should not be permitted. Excess soil and debris from the relocation work should be disposed of. Plant materials disturbed by excavating, planting, or replanting should be replaced.
- (K) Maintenance should include weekly water management to include soil probing and observation of soil moisture sensing devices and palm tree pruning. Pruning should be done with reciprocal saws (chain saws should not be allowed). Saw blades should be sterilized between each tree with 50% household bleach and 50% water for ten minutes. Pruning should be done to maintain a neat appearance.

(b) Site Landscaping

- (1) Trees shall be planted in areas of public view adjacent to structures, either singly or in grove effect, at the equivalent of one (1) tree per thirty (30) linear feet of building area.
- (2) Site landscaping should be used to define entrances and walkways, to screen parking and loading areas, for micro-climate control, and to enhance views of the site from inside building.

- (3) Wall expanses should be protected from graffiti by adjacent plantings of shrubs or vines.
- (4) Suggested accent trees providing seasonal variation and color are listed in Table EV4.2.
- (5) Seasonal plantings of colorful flowers are encouraged to accent entrances and walkways.
- (c) All landscaped areas shall be served by a total coverage, automated irrigation system. Where appropriate, drip irrigation shall be encouraged.
- (d) Graded areas proposed for development in a later phase shall be planted with annual grasses and shall be maintained in a weed-free condition until development occurs, if said phase will not begin construction within six (6) months of completion of previous phase.

Section EV4.0270 Landscape Maintenance

- (a) Property owners are responsible for the installation and maintenance for landscaping on their on-site landscaped area and the contiguous planted right-of-way, except where landscaping in the public right-of-way is maintained by a Landscape Maintenance District.
- (b) Any damage to the landscaping and irrigation systems shall be corrected within thirty (30) days from date of damage.
- (c) Any replacement landscaping within the street setback must be replaced with plant materials that are equal to the size, form and species of the adjacent existing plant materials.
- (d) All trees and plant material, when established, shall be trimmed so that they shall not encroach upon the sidewalk or street so as to impede or interfere with vehicle or pedestrian traffic, or obstruct the illumination from any streetlight to the street or sidewalk.
- (e) In residential tracts, the Developer shall guarantee street trees for a minimum of one year after acceptance of the tract and until 80% of the units are occupied. Maintenance of all trees shall become the responsibility of the homeowner upon occupancy.
- (f) All plantings shall be maintained in healthy growing condition. Fertilization, cultivation and pruning are to be carried out on a regular basis.

- (g) Dead or dying plants shall be removed and replaced as quickly as possible (30 days maximum except where seasonal conditions prohibit).
- (h) All plantings are to be irrigated as often as necessary to maintain healthy growing conditions.
- (i) Irrigation systems are to be kept in proper working condition. Adjustment, repair and cleaning are to be done on a regular basis.
- (j) Tree guys, stakes, etc., shall be adjusted on a regular basis to maintain neat appearance and to prevent damage to trees.

TABLE 4-1

**EAST VALLEY CORRIDOR SPECIFIC PLAN
LIST OF
RECOMMENDED STREET TREES**

<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>
Albizia julibrissin	Silk Tree
Cinnamomum camphora	Camphor Tree
Cupaniopsis anacardioides	Carrot Wood Tree
Eucalyptus sideroxylon	Red Iron Bark
Jacaranda acutifolia	Jacaranda
Koelreuteria bipinnata	Chinese Flame Tree
Lagerstroemia indica	Crape Myrtle
Liquidambar styraciflua "Palo Alto"	Sweet Gum
Liquidambar styraciflua "Burgundy"	Sweet Gum
Liriodendron tulipifera	Tulip Tree
Magnolia grandiflora "Majestic Beauty"	Southern Magnolia
Melaleuca quinquenervia	Cajeput Tree
Pinus canariensis	Canary Island Pine
Pinus halepensis	Aleppo Pine
Pistacia chinensis	Chinese Pistache

BOTANICAL NAMECOMMON NAME

Platanus acerifolia

London Plane Tree

Prunus cerasifera "Atropopurea"

Purple Leaf Plum

Schinus terebinthifolius

Brazilian Pepper

Washingtonia filifera

California Fan Palm

Washingtonia robusta

Mexican Fan Palm

NOTE: Additional trees may be used subject to approval.

TABLE 4-2

**EAST VALLEY CORRIDOR SPECIFIC PLAN
LIST OF
RECOMMENDED ACCENT TREES**

<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>
Albizia julibrissin	Silk Tree
Alnus rhombifolia	White Alder
Arecastrum romanzoffianum	Queen Palm
Brachychiton acerifolius	Flame Tree
Brachychiton populneus	Deodar Cedar
Cupaniopsis anacardioides	Carrot Wood Tree
Eucalyptus citriodora	Lemon-Scented Gum
Eucalyptus nicholii	Peppermint Gum
Eucalyptus polyanthemus	Silver Dollar Gum
Eucalyptus rudis	Desert Gum
Eucalyptus sideroxylon	Red Ironbark
Ficus nitida	Indian Laurel Fig
Geijera parviflora	Australian Willow
Jacaranda mimosifolia	Jacaranda
Koelreuteria bipinnata	Chinese Flame Tree
Lagerstroemia indica	Crape Myrtle

<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>
Liquidambar styraciflua	Sweet Gum
Liriodendron tulipifera	Tulip Tree
Orange Tree	
Pinus canariensis	Canary Island Pine
Pinus eldarica	Mondell Pine
Pinus halepensis	Aleppo Pine
Pinus roxburghii	Roxburg Pine
Pistaccia chinensis	Chinese Pistache
Platanus acerifolia	London Plane Tree
Podocarpus gracilior	Fern Pine
Prunus cerasifera	Purple Leaf Plum
Schinus terebinthifolius	Brazilian Pepper
Tristania conferta	Brisbane Box

NOTE: Additional trees may be used subject to approval.

TABLE 4-3

**EAST VALLEY CORRIDOR SPECIFIC PLAN
SUGGESTED DROUGHT-RESISTANT PLANT MATERIALS LIST
FOR LANDSCAPED AREAS**

I. Foliage plants

<u>BOTANICAL NAME</u>	<u>COMMON NAME</u>
Agapanthus	
Arbutus unedo	Strawberry Tree
Centaurea gymnocarpa	Dusty Miller
Dodonaea viscosa	Hopseed Bush
Elaeagnus	
Ilex species	
Leptospermum scoparium	
Ligustrum "Texanum"	
Photinia fraseri	
Pittosporum	
Raphiolepis indica	
Rhamnus alaternus	Italian Buckthorn
Rhus ovata	Sugar Bush
Viburnum species	
Xylosma congestum	

II. Flowering PlantsBOTANICAL NAMECOMMON NAME

Callistemon citrinus

Lemon Bottlebrush

Cassia artemisioides

Feathery Cassia

Cistus

Rockrose

Coreopsis verticillata

Fremontodendron

Flannel Bush

Lantana

Lavandula

Lavender

Nerium oleander

Oleander

Plumbago auriculata

Cape Plumbago

III. Vines

Bougainvillea

Campsis

Trumpet Creeper

Solanum jasminoides

Potato Vine

Tecomaria capensis

Cape Honeysuckle

IV. Ground Covers

Baccharis pilularis

Coyote Bush

Ceanothus

Wild Lilac

Cotoneaster

Gazania

Grevillea

BOTANICAL NAMECOMMON NAME

Hypericum calycinum

Creeping St. Johnswort

Rosmarinus officinalis

Rosemary

Santolina chamaecyparissus

Lavender Cotton

Section EV4.0275 Site Grading

- (a) Effective site grading can be utilized to enhance the architecture, screen parking and loading areas and help provide for privacy or adjoining areas.
 - (1) Earth berms adjacent to public rights-of-way shall be constructed to a smooth, rounded, continuous natural contour, with slope not to exceed 3:1. Construction of berms shall not interfere with normal drainage of water anywhere on the site.
 - (2) Industrial or commercial sites located adjacent to residential areas should not be at a higher grade than residential uses.
- (b) All sites shall drain adequately to off-site collectors without interfering with adjacent properties. All site grading shall be designed to provide positive drainage without leaving standby water.
- (c) No cut or fill slopes of any type shall be steeper than 3:1, with smooth vertical transitions. Where space limitations demand, terracing with approved retaining walls shall be utilized.
- (d) Where retaining walls are required, they shall be of a material compatible with the building architecture.
- (e) Berms, channels, swales, etc., shall be graded in such a way as to be an integral part of the grading and paved surface designed with smooth vertical transitions between changes in slope.
- (f) Adequate diking of outdoor storage areas shall be provided where any chemicals or other substances used or kept on site present any potential risks downstream from the site.
- (g) All site grading shall be designed to meet the following standards:

	<u>Minimum Slope</u>	<u>Maximum Slope</u>
Planting areas	2%	3:1 (33%)
Parking lot pavement (1% with P.C.C. flow lines)	2%	4%
Driveways, access drives 2% (.6% with P.C.C. flow lines)	2%	6%

Pedestrian plazas	1%	2%
Pedestrian walkways	1%	8%

Section EV4.0280 Construction Phase Requirements

- (a) In order to minimize soil erosion by water and wind, practical combinations of the following procedures shall be used:
 - (1) The permanent landscaping shall be installed within 60 days after substantial completion of the structural improvements on a lot.
 - (2) Erosion control measures shall be required for imported fill subject to erosion, on construction projects over six months duration.
- (b) The Developer is responsible for ascertaining the location of underground utilities and for protecting them during construction.
- (c) All construction storage and equipment yards shall be located on the site in a manner to minimize their impact on adjacent properties and public streets.
- (d) Construction sites shall be maintained in a neat and orderly manner. All trash shall be kept in enclosed containers and removed frequently.
- (e) Construction access shall be coordinated with and approved by the reviewing authority. Special care shall be taken to protect existing pavements and landscaping from damage. Dirt and mud shall be removed promptly from adjacent streets and sidewalks.
- (f) At the end of the construction period, by phase, the Developer shall submit to the reviewing authority reproducible copies of record drawings (as-built) showing the actual locations of all underground utilities and irrigation systems.

Section EV4.0285 Maintenance

- (a) All owners or occupants of property shall maintain all buildings, drives, parking lots, or other structures located upon said property in good and sufficient repair and shall keep such premises painted, windows glazed, paving swept and otherwise maintain the property in an aesthetically pleasing manner.

- (b) Any structure, driveway or parking lot surface which is damaged by the elements, vehicles, fire or any other cause shall be repaired as promptly as the extent of damage will permit.
- (c) Grounds shall be maintained in a safe, clean and neat condition free of rubbish and weeds. Roads and pavements shall be kept true to line and grade in good repair. Drainage ditches shall be kept clean of any obstacles.

Section EV4.0290 Signs

The provisions of the Redlands Municipal Code governing signs shall apply to development proposed within the boundaries of this Specific Plan and for any development located within the City's Sphere of Influence in the East Valley Corridor area requesting land-use entitlements or other approvals from the City.

The following criteria of the Redlands Municipal Code shall apply to the land use districts contained in this Specific Plan:

EVCSP Land Use District	Applicable Redlands Municipal Sign Code Criteria
Single Family Residential	Sign criteria for Residential Districts shall apply
Multiple Family Residential-3000	Sign criteria for Residential Districts shall apply
Multiple Family Residential-2500	Sign criteria for Residential Districts shall apply
Administrative Professional	EV-AP Administrative Professional
Neighborhood Commercial	C-2 Neighborhood Commercial
General Commercial	C-4 Highway Commercial
Regional Commercial	Sign criteria for the C-4 Highway Commercial district shall apply
Commercial Industrial	C-M Commercial Industrial
Regional Industrial	M-2 General Industrial
Special Development	Sign criteria for land use districts proposed within a Planned Development shall apply as shown in this table
Public Institutional	O Open Land
Open Space	O Open Land
Science Research Park	M-P Planned Industrial

DIVISION 5. OVERLAY DISTRICTS**CHAPTER 1. GENERAL PROVISIONS****Section EV5.0101 Intent**

- (a) Overlay Districts are established in order to recognize and map environmental constraints or amenities which should be taken into consideration when land development is being proposed. Overlay Districts will be designated in conjunction with those land use districts that are affected by an environmental constraint or amenity.
- (b) For example, special development standards are necessary in earthquake fault areas in order to protect the health, welfare and safety of the public. Therefore, when a residential land use district is proposed for an area that has active earthquake faults, an overlay district will be established to map the hazardous areas and to propose special development standards.
- (c) An overlay district may be mapped over any land use district. The development standards used for a site shall be those set forth in the overlay district or the land use district, whichever is more restrictive.
- (d) The procedures for using overlay districts shall be as provided by this Division.
- (e) When appropriate, deviations from standards set forth in the overlay districts may be granted in accordance with the provisions of the deviation procedures of the reviewing agency.

Section EV5.0105 Format

- (a) Overlay districts are divided into two (2) groups.
 - (1) The Preservation Overlay Districts are intended to preserve and protect valuable resources which have been identified by a community as needing such protection. In the East Valley Corridor Specific Plan, a Preservation Overlay District has been established to protect historical and archaeological resources.

- (2) Safety Overlay Districts are intended to identify natural or man-made conditions which are a potential threat to public health and safety and to formulate requirements to mitigate that threat. In the East Valley Corridor Specific Plan, Safety Overlay Districts have been established for areas subject to flooding and for areas prone to high noise levels.
- (b) Each Overlay District Chapter contains the following Sections: "Intent", "Locational Requirements", and "Development Standards". The "Intent" and "Locational Requirements" Sections provide the necessary information for locating overlay districts within the Specific Plan. The "Development Standards" Section provides the necessary regulatory guidance for land use proposals that are within an overlay district in addition to those required by the applicable land use district, Specific Plan standards and/or other development requirements of the reviewing agency.

Section EV5.0110 Overlay District Application

The regulations and development standards established by an overlay district shall be imposed in addition to those established by the underlying land use district, shall prevail when they are more restrictive, and shall overlay all land use districts on all parcels or portions thereof which are encompassed or circumscribed by one or more overlay districts. The land use districts may augment and strengthen the standards and provisions specified by an Overlay District.

Section EV5.0115 Implementation Review

- (a) When an application for a land use decision or development permit is accepted for an area that lies within an overlay district, the reviewing authority that has accepted the application shall determine if there is adequate review of the proposed project to determine compliance with the provisions of the overlay district. If the application process for the land use decision does provide adequate review, then no additional application shall be required.
- (b) In the event that the land use application does not provide for adequate review of the proposed project, the reviewing authority that has accepted the application shall require that the applicant submit the proposed project to the appropriate department within the reviewing agency, to ensure compliance with the development guidelines of the Overlay District.

Section EV5.0120 Uses Permitted

The uses permitted on a parcel which has an overlay district shall be those uses allowed by the primary land use district subject to the provisions of all applicable overlay districts and development requirements of the reviewing agency. Where the regulations or standards established by an overlay district conflict with provisions of a primary land use district, the more stringent regulations or standards shall govern.

Section EV5.0125 Establishment and Change of an Overlay District

The provisions of each Chapter of this Division, in conjunction with the applicable Specific Plan provisions, shall provide the criteria for the establishment or change of the applicable overlay district. Each overlay district is an individual land use designation that is a separate and independent designation from the primary land use district and remains with the property irrespective of the underlying land use district unless specifically changed. A change in the primary underlying land use district does not change an overlay district designation.

Overlay Districts shall be established or amended by way of a Specific Plan Amendment as provided in Section EV1.0505.

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CHAPTER 2. PRESERVATION-HISTORICAL/ARCHAEOLOGICAL OVERLAY DISTRICT

Section EV5.0201 Intent

- (a) This District is intended to assist in the identification and preservation of significant archaeological and historic resources.
- (b) Preservation of such cultural resources provides a greater knowledge of community history, thus promoting community identity and conserving historic and scientific amenities for the benefit of future generations.

Section EV5.0205 Locational Requirements

- (a) This District P-HA may be applied to those areas where archaeological and historic sites which warrant preservation have been specifically identified or are believed likely to be present. Specific identification of cultural resources are indicated by listings in one or more of the following inventories:

California Archaeological Inventory
California Historic Resources Inventory
California Historical Landmarks
San Bernardino County Points of Historic Interest
National Register of Historic Places

- (b) In the East Valley Corridor Specific Plan, this Overlay is applied to an area approximately 600 feet on either side of the original course of the Mission Zanja irrigation channel. This area was the site of early settlement and is believed to contain cultural and historical resources. In addition, potential historic structures (that are 50 years old or older) that are located within the Preservation/Historical-Archaeological Overlay District are included on the Overlay District Map.

Section EV5.0210 Development Standards

When a land use is proposed or permit applied for within the Preservation-Historical/Archaeological Overlay District, the following criteria shall be used to evaluate the project's compliance with the intent of the overlay.

- (a) The presence (or absence) of archaeological and historical resources within a given project area must be determined through an appropriate investigation by qualified personnel.

- (b) Data recovery or protection measures should be developed and implemented for identified cultural resources determined to be significant by a qualified archaeologist or historian. Such measures may include, but are not limited to:
 - (1) Site recordation;
 - (2) Mapping and surface collection of artifacts, with appropriate analysis and curation;
 - (3) Excavation of sub-surface deposits when present, along with appropriate analysis and artifact curation;
 - (4) Preservation in an open space easement and/or dedication to an appropriate institution with provision for any necessary maintenance and protection.
- (c) Archaeological and historical resources which are determined by qualified professionals to be extremely significant should be preserved as open space or dedicated to a public institution when possible.

CHAPTER 3. SAFETY-FLOOD OVERLAY DISTRICT**Section EV5.0301 Intent**

- (a) The Safety-Flood Overlay District is created to promote public health, safety and general welfare and to minimize public and private losses due to flood conditions, by establishing regulations for any development within flood prone areas.
- (b) Flood Overlay District regulations and standards shall be imposed in addition to, and shall overlay al 1 other districts which are encompassed or circumscribed by one or more Flood Overlay Districts.

Section EV5.0305 Locational Requirements

- (a) This Overlay District is applied to areas of special flood hazard, identified by the Federal Emergency Management Agency or the Federal Insurance Administration. This Flood Insurance Study is the minimum area of applicability of this ordinance, which may be supplemented by studies for other areas as prepared by the County Flood Control District, the U.S. Army Corps of Engineers, or the Flood Insurance Administration.
- (b) The Flood District in the East Valley Corridor Specific Plan shall be subdivided into three (3) zones for regulation purposes, as follows:
 - (1) FP-1 (100-year Flood Area). Areas of 100-year flood as defined by the Federal Flood Insurance Regulations.
 - (2) FP-2 (500-year Flood Area). Areas between limits of the 100-year flood and 500-year flood; or areas subject to 100-year flooding with average depths less than one (1) foot or where the contributing drainage area is less than one (1) square mile; or areas protected by levees from the base flood.
 - (3) Floodway (FW). Areas of flood flow, such as the channel of a river or drainageway, and those portions of the floodway adjoining the channels which are reasonably required to efficiently carry the discharge of flood water or flood flow of any river or stream.

- (c) In the East Valley Corridor Specific Plan, the Safety-Flood Overlay District shall be applied to areas adjacent to and prone to flooding from San Timoteo Creek and the Mission Zanja channel.

Section EV5.0310 Development Standards

When an application for a land use decision or development permit is accepted for an area that lies within a Safety-Flood Overlay District, the applicable development standards for flood hazard zones adopted by the governing authority shall be applied to the project.

CHAPTER 4. SAFETY-NOISE (S-N) OVERLAY DISTRICT

Section EV5.0401 Intent

The Safety-Noise Overlay District is created to provide greater public safety by establishing land use review procedures and requirements for land uses in areas with identified high noise levels.

Section EV5.0405 Locational Requirements

- (a) The Safety-Noise Overlay should be applied to those areas where the Level (Day/Night) (Ldn) is 65 decibels, 65 dB (A) or greater.
- (b) Community noise acoustical reports may be required during developmental processes to determine actual noise levels and contours.
- (c) Certain land uses may not be compatible at 65 Ldn dB (A) or greater.
- (d) In the East Valley Corridor Specific Plan, this Overlay is established over areas subject to aircraft noise related to Norton Air Force Base, and to traffic noise generated on Interstate 10 and on major arterials.

Section EV5.0410 Development Standards

When a land use is proposed within a Safety-Noise Overlay, the following standards shall apply with respect to residential uses:

- (a) Noise levels shall be identified. An acoustical report shall be performed to identify noise impact and land uses.
- (b) Interior noise levels in all one-family and multifamily residences and educational institutions shall not exceed 45 dB(A) Ldn emanating from sources outside of the residential building.
- (c) Exterior noise levels in all one-family residential land use areas and multifamily residential land use areas should not exceed 65 dB(A) Ldn. Exterior noise levels shall not exceed 70 dB (A) Ldn for any residential areas.
- (d) Ability to mitigate exterior noises to the levels of 65 dB(A) Ldn and 70 dB(A) Ldn shall be considered by the reviewing authority when determining the actual Ldn level with which the land uses must comply.

- (e) In areas where noise exceeds the noise standard, measures shall be taken to mitigate noise levels. An acoustical report identifying these mitigation measures shall be required and reviewed by the reviewing agency prior to issuance of any required permits or approval of land use applications.
- (f) All other structures shall be sound attenuated against the combined input of all present and projected exterior noise to meet the following criteria;

Typical Uses	12-Hour Equivalent Sound Level (Interior) dB(A) Ldn
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Educational Institutions:

Libraries, Churches, etc.	45 dB(A)
General Office, Reception, etc.	50 dB(A)
Retail Stores, Restaurants, etc.	55 dB(A)

Other Areas for Manufacturing Assembly:

Test, Warehousing, etc. 65 dB(A)

In addition, the average of the maximum levels of the loudest of intrusive sounds occurring during a 24-hour period shall not exceed 65 dB(A) interior.

DIVISION 6. COMMUNITY FACILITIES**Introduction**

State law requires that a specific plan shall include "the proposed distribution, location, and extent and intensity of major components of public and private transportation, sewage, water, drainage, solid waste disposal, energy, and other essential facilities proposed to be located within the area covered by the plan and needed to support the land uses described in the plan" (Section 65451, California Government Code).

Division 6 is included to comply with State requirements for public facilities planning in the Specific Plan. This Division will summarize the existing facilities serving the planning area, as well as required improvements needed to serve proposed land uses under the Specific Plan. The final chapter contains a proposed phasing plan for required improvements.

Portions of the following sections were abstracted from engineer's reports prepared for the Specific Plan. To obtain detailed descriptions of technical engineering design standards for water, sewerage and drainage systems, refer to the East Valley Corridor Specific Plan Engineer's Report, Appendix "A" of the Specific Plan.

CHAPTER 1. ROADS**Section EV6.0101 Existing Facilities**

Arterial access to the study area from the south, east and west is adequately provided via four closely spaced interchanges along Interstate 10. However, arterial access to the study area from the north and northwest is severely limited by the physical presence of the Santa Ana River Wash and Norton Air Force Base. South of I-10, east/west access is provided via Barton Road and Redlands Boulevard from Redlands to San Bernardino through the study area. In recent years, the combination of increasing inter-regional travel along I-10, increasing local development within the study area, and the limited adjacent arterial facilities through the corridor have led to increased peak hour congestion on I-10 and at key intersections within the study area.

(a) Regional Highway System**(1) Interstate 10**

In 1984, Caltrans reported that the existing 6 travel lanes of I-10 were carrying approximately 87,000 vehicles daily at level of service (LOS) D. They forecast that by the year 2005, that portion of I-10 from SR-30 to I-215 will carry 172,000 vehicles daily. In order to meet that demand, Caltrans has included funds for the

addition of two travel lanes on I-10 from SR-30 to the I-215 interchange, in the 5-Year State Transportation Improvement Program. Even with those improvements, however, LOS E operation, with average daily speeds of 42 miles per hour, are forecast (Caltrans "I-10 Route Concept Report," November 1984).

(2) State Route 30

SR-30 is a new, high speed, grade separated facility designed to serve intra-regional and local trips for those communities developing between the foothills of the San Gabriel and San Bernardino Mountains. SR-30 connects those communities to I-10. SR-30 is planned to extend from I-10 to north of Highland Avenue, then turn west, to parallel Highland Avenue. Ultimately, SR-30 is proposed to interchange with I-215, and eventually terminate in the City of La Verne.

SR-30 is presently incomplete, with a segment missing north of the study area between Fifth Street and Highland Avenue in San Bernardino. Further, SR-30 now terminates at SR-259, just short of I-215. An extension of the existing terminus is planned to bring SR-30 into an interchange with the I-215 and beyond to merge it into Highland Avenue on the west side of the City of San Bernardino. That extension plus the construction of the missing segment, the upgrading of the SR-30/I 10 interchange to a fully grade separated four way interchange, and the addition of two lanes to the existing portion of SR-30, are all programmed into the current 5-Year State Improvement Program.

Currently, the traffic volumes on SR-30 are very low (8,800 ADT in 1983) due to the missing segment and lack of a connection to I-215. According to Caltrans' fore-cast, however, with the completion of the facility, and the growth anticipated in the subregion, SR-30 will carry a daily traffic volume of 56,000 vehicles and operate at LOS D, with average speeds of 40 miles per hour, by the year 2005 (Caltrans "SR30 Route Concept Report", June 1985).

(b) Access to the Regional Highway System

In general, the study area has good access to the regional highway system. Four arterials (Alabama Street, California Street, Mountain View and Anderson Street) have an interchange with I-10, and one, San Bernardino Avenue, has an interchange with SR-30. As noted previously, arterial access to the northern portion of the study area is poor; consequently, the connection of the local street system in this portion of the study area to those in the surrounding communities is limited.

(1) I-10 North

The primary cause of this isolation of the study area from the north is the cost and difficulty of roadway construction across the Santa Ana River Wash. The Wash forms the northern boundary of the study area, angling from the northeast to the southwest, crossing I-10 just west of I-215. The only arterial access into this portion of the study area from the north is provided by Alabama Street, which crosses the wash adjacent to SR-30. The Alabama Street crossing is a causeway and not a bridge, and is subject to inundation and washing out. Although the crossing has been upgraded recently, it cannot be considered to be all weather.

Contributing to the isolation of the study area from the communities to the north is Norton Air Force Base, which lies north of the wash. Tippecanoe Avenue, at the west end of the study area, crosses the wash but does not directly connect the study area to the north; it ends at the main entrance to the Base, where it intersects with Mill Street. Tippecanoe Avenue serves as the primary entrance to the Air Force Base and was recently upgraded to four lanes across the wash by the City of San Bernardino.

Access to and from the west is similarly constrained. San Bernardino Avenue is identified on the County's Circulation Element as continuous from Redlands to downtown San Bernardino. While San Bernardino Avenue is continuous from Redlands through the study area, the street ends at Tippecanoe Street, east of the Santa Ana Wash and just west of the planning area.

The County's Master Plan calls for a bridge over the wash, and a connection to Pioneer to extend into downtown San Bernardino. This connection to Pioneer has not been made, however, and indications from the City are that it is unlikely in the foreseeable future. This is due again to the cost of bridging the wash and, further west, the presence of a church which would require an offset of Pioneer Street, west of Waterman Avenue.

The most likely means of east/west arterial circulation would be along San Bernardino Avenue to Mill Street or Central Avenue, using the Tippecanoe Avenue crossing. The City of San Bernardino is considering an upgrading of the Tippecanoe/Mill Street intersection which would enhance that movement.

(2) I-10 South

The portion of the study area to the south of Interstate 10 is better served by arterial access. Adjacent to the freeway, Redlands Boulevard provides east/west circulation through the study area. Together with the freeway, Redlands Boulevard forms a corridor dominated by highway-oriented commercial development. This facility is continuous from Redlands through Loma Linda to San Bernardino.

Farther south, Barton Road, a high speed, divided major arterial, forms the southern boundary of the project area. This facility provides excellent access into the study area from both the east and west and connects to the I-215/SR-91 freeway to the west. That connection requires the traversing of a low ridge off Blue Mountain, however, and results in a reduced cross section due to the steeper terrain west of its intersection with Washington Street. Because Washington Street avoids Blue Mountain, and provides a more direct connection, access to I-215/SR-91 from Barton Road in the study area can be expected via Washington Street.

(c) Arterial Highway System

Within the project area, the arterial system is dominated by a commercial corridor adjacent to I-10 and generally bounded by Redlands Boulevard to the south and Lugonia Avenue to the north. Outside of this area, the local street system has not yet been developed to County standards, due

to the agricultural nature of the land use. Curb, gutters, and sidewalks are absent and pavement widths are less than standard. Pavement conditions are poor throughout the study area, and the median in Redlands Boulevard is deteriorating.

Currently, traffic in the study area is generally light, although some congestion is occurring at intersections in the commercial corridor during peak hours. Several of the major intersections along Redlands Boulevard are currently congested during peak traffic hours. This congestion is compounded at Anderson Street and Alabama Street by traffic from the freeway interchanges located just to the north of these two intersections.

The majority of traffic uses Alabama Street, Redlands Boulevard, Anderson Street and Lugonia Street. This pattern reflects commercial development and some freeway bypass activity. Conditions currently identifiable as restrictions to local circulation that have implications for impact on future development include:

- (1) Local street offsets and terminations often associated with the railroad tracks and irrigation and flood control facilities which cross the study area.
- (2) Traffic delays related to train activity at the numerous crossings in the study area.
- (3) Higher than average highway construction costs related to irrigation and flood control facilities and needs.
- (4) The large number of commercial driveways and their proximity to intersections, particularly on Redlands Boulevard.
- (5) The proposed removal of the existing median in Redlands Boulevard which will result in increased turns and reduce the carrying capacity of the arterial.
- (6) The acute angle intersection of West Colton and Redlands Boulevard.

- (7) The geometrics of the Interstate 10 off ramps have limited sight distance and minimal merge distances. Also, the interchange configuration forces a number of left turns that can become seriously congested with increased volumes. Particularly impacted are Anderson Street and Alabama Street.
- (8) Alabama Street from Redlands Boulevard to Lugonia Street over the I-10 freeway has many constrictions and high potential for delay. Within less than one-half mile there are several traffic signals, off-ramp merges, left turns on to and off of the freeway and a rail crossing. A similar situation exists on Anderson Street between Redlands Boulevard and the freeway although there is no rail crossing at this location.

(d) Public Transit

Public transportation in the East Valley Corridor is provided by Omnitrans. Reflecting both the limited development of the land and arterial highway system, public transportation in the study area is minimal. Omnitrans currently provides 3 routes through the study area which connect the cities of Redlands, Loma Linda and San Bernardino. With the exception of a short portion serving the County Museum and Norton Air Force Base, all the routes are south of I-10. Two routes cross the corridor on Tippecanoe/Anderson, then travel east/ west on Barton Road. The third route enters from Loma Linda on University Avenue and meanders through the southern portion of the study area.

(e) Rail

Two major rail lines traverse the study area both trending east/west. The northernmost line has the most potential to slow traffic, crossing Mountain View Avenue, California Avenue, Nevada Street and Alabama Street between Redlands Boulevard and I-10. The southern line is grade separated where it crosses Barton Road, a branch then turns north to parallel California Street to State Street, where it turns east and continues out of the study area. Several spurs have been constructed off these main branches.

Section EV6.0105 Planned Road System Improvements**(a) Planning Objective for Circulation System**

The primary objective in planning the circulation network for the East Valley Corridor was to improve and expand the public roadway system to meet existing and future travel demands within the Corridor, and to provide sufficient roadway and intersection capacities to maintain a minimum level of service "C".

(b) Recommended Facilities

A traffic analysis model was generated for the East Valley Corridor project to estimate future traffic volumes and their distribution. The model considered existing traffic counts, proposed development adjacent to the East Valley Corridor, and future internal trips generated at plan build-out.

The traffic model was used to finalize the Circulation Plan for the Specific Plan, contained in Section EV4.0105. Because the existing road network within the planning area is inadequate and roads are substandard, it was determined that conformance with the Circulation Plan will require construction of approximately twenty-nine (29) miles of new roads. In addition, forty-one (41) signals will be required, and two (2) bridges must be constructed (one at Palmetto Avenue and SR-30, and one at Redlands Boulevard and California Street).

The traffic analysis concluded that "as with most traffic networks, the congestion is at intersections... The major constraint in the CSA-110 network is Alabama Street." In order to mitigate congestion on Alabama, the study recommended use of a coordinated signal system on that arterial. It is also recommended that an all-weather crossing be provided over the Santa Ana River at Alabama Street, to carry northbound traffic from the planning area up to the Route 30 interchange at Fifth Street.

Additional turning lanes will also be required at many of the intersections to reduce congestion from existing and projected traffic levels.

For a more detailed presentation of specific road improvements, see the Engineer's Report prepared for the Specific Plan (Appendix B.).

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CHAPTER 2. WATER SUPPLY

Section EV6.0201 Existing Facilities

Existing water supply facilities are described in this section. Water supply facilities include groundwater wells, water treatment plants, transmission and distribution pipelines, storage reservoirs, booster pumping stations and pressure reducing valves. Key facilities within the study area are described, as well as overall water supply and demands for each agency serving the area.

(a) Institutional and Regulatory Setting

(1) Water Supply Agencies

The study area is currently served by the City of Redlands and the City of Loma Linda for its domestic supply. The City of Loma Linda has a major intertie with the city of San Bernardino for supplemental supply when needed. The area north of Lugonia Avenue in the City of Redlands has no major water distribution facilities due to limited development. However, both cities have plans to eventually serve the entire areas within their current city limits or spheres of influence when development occurs. Because the study area is still largely agriculturally oriented, there are numerous private and small mutual water company's non-potable water wells and distribution systems. There are over 50 wells located in the study area. Additional agricultural water is obtained from Santa Ana River and Big Bear Lake releases. The existing agricultural facilities are expected to be phased out with the conversion of the land from agriculture to higher density residential or commercial use. The City of Redlands also operates an agricultural non-potable system called the Contract "B." area which is generally south of Redlands Boulevard.

The study area is also under the jurisdiction of the San Bernardino Valley Municipal Water District (SBVMWD) formed in 1954 as a State Project Water contractor and a regional water supply planning agency. Under the Mill creek Cooperative Exchange Plan, Santa Ana River water or State Project water will be transported to the City of Redlands water treatment plants which in turn can supply the study area.

(2) Regulatory Agencies

The primary water supply regulatory agency for larger domestic water supply facilities is the State Department of Health Services (SDOHS). This agency has enforcement power to ensure that all potable water supplies meet State and Federal, primary and secondary, water quality standards.

(b) Quality and Quantity of Water Supply(1) City of Redlands

The City has been intensively planning future water supply facilities since their 1981 Water Master Plan update identified increasing contaminant problems in a significant number of their wells. The City's water supply is currently from four sources, including Mill Creek, the Santa Ana River, State Project water, and groundwater. On a yearly average, approximately half of the demand is supplied from the Tate Water Treatment Plant which treats water from Mill Creek. The remaining supply is from 26 ground-water wells located throughout the City, including several wells in the study area.

The City historically has had nitrate concentrations above the 45 mg/L public health limit in several of their wells. Other groundwater quality problems include volatile organic compounds (TCE, DBCP, etc.), which were first identified in 1981, and high fluoride concentration.

To meet the current and future demands, the City of Redlands has constructed the new 12 mgd Horace P. Hinkley Plant, which treats Santa Ana River water, as well as State Project water delivered through the SBVMWD facilities. The plant is located in Mentone about 3 miles east of the study area.

The Tate Water Treatment plant has been treating water from Mill Creek since 1967. The plant is located in Mentone, about 7 miles east of the study area, at an elevation of about 2,300 feet. The plant has a nominal treatment capacity of 12 mgd. Under the SBVMWD Exchange Plan, the Tate Pumping Station now provides Santa Ana River water. In the future, when Exchange facilities are completed State Project water will be available at the plant for treatment.

There are several key groundwater wells located in or adjacent to the study area. The City is also exploring the possibility of using agricultural wells. The City recently purchased an agricultural well located in the study area (the Mission well on Bryn Mawr). The Orange Street well, located just east of the study area and owned by the Bear Valley Mutual Water Company, is currently being utilized by the City. The groundwater resources available to the study area are abundant in terms of quantity, but water quality problems have limited their use.

Since much of the East Valley Corridor area is still in agricultural use, water demands are low, and the study area requires less than six percent of Redlands total demand. As the area develops and agricultural land is converted to more intensive uses, demand will rise sharply and the East Valley Corridor area can be expected to take a larger percentage of the City's total production.

(2) City of Loma Linda

The City of Loma Linda water supply picture is somewhat less complicated than Redlands, as the City relies only on groundwater and total demands are much smaller. However, this sole supply could be somewhat less reliable if well water quality problems develop. The City in the past has operated several wells between Anderson Street and Mountain View and south of Redlands Boulevard which have experienced nitrate contamination. Currently the City operates two major good quality wells on Cooley Street off Mountain View just to the west of the study area, and a third well on California Street south of Barton Road. Two additional wells have been completed on Richardson Street.

In addition to the wells, the City can receive up to 2.0 mgd of water through an intertie with the City of San Bernardino system at Anderson Street and Redlands Boulevard as an emergency supply. The San Bernardino system also relies completely on groundwater and has a large capacity. Recently several of the San Bernardino wells have had TCE or PCE above the action level and had to be shut down. San Bernardino is currently evaluating this problem and could elect not to provide water outside their Water Department boundary until more capacity is available. In any event, the current Loma Linda peak day demand is 5.7 mgd which is less than their total usable well capacity of 7.5 mgd.

The City does not have a current Master Plan for water supply. The existing and planned well capacity plus the San Bernardino intertie appear to provide more than adequate capacity to meet near-term growth in demand.

(c) Groundwater Levels

The groundwater levels in the study area are impacted by the overall groundwater levels in the Bunker Hill Basin. About one-third of the study area overlies the Basin's pressure zone. The boundary line of the pressure zone runs north-south along California Street. This zone represents an area, particularly in the south-western and downtown portion of the City of San Bernardino, that has historically and recently experienced very high groundwater levels (at or within 3 feet from the ground surface) and artesian flow from some wells. The high groundwater levels have increased liquefaction potential of certain soil types during an earthquake, which may result in severe damage to buildings and structures in the affected areas.

In addition, extreme high groundwater levels affect many existing foundations and increase the cost of new construction. Based on limited existing information, the groundwater levels in the study area are a minimum of 30 feet below ground surface in the extreme north-western portion of Loma Linda. The average groundwater level throughout the study area is over 50 feet from ground surface. At this average groundwater level, there should not be any severe construction impact in the area of the East Valley Corridor.

(d) Water Distribution Facilities

(1) City of Redlands

The study area falls within the City's two lowest pressure zones, the 1350 and 1570 zones. About two thirds of the study area, within the City, is in the 1350 zone. The current water demand in the 1350 zone is one of the lowest in the City; however, the City has a backbone system in the zone which more than adequately serves existing development. A major east-west primary distribution main runs along Lugonia Avenue from well 34 to the Texas Street water complex. There are three north-south interties with the Lugonia main and another primary main in Redlands Boulevard at Mountain View,

California and Alabama Streets. Primary mains also extend south of Redlands Boulevard along New Jersey and Alabama Streets to Barton Road. The 12 inch diameter mains are adequate to carry maximum day demands with fire flows of 2,500 gpm. They also form a strong network which can be systematically expanded to serve development in the study area.

Local storage for the 1350 zone consists of the 1.0 million gallon (MG) Texas Street reservoir. Using City criteria, this amount of in-zone storage is just adequate for existing conditions, so a new reservoir will be required in this zone in the future. Storage in the 1570 zone totals 23.7 MG located in three major reservoirs. This is the largest amount of storage in any zone in the City of Redlands. The storage in the 1570 zone is more than adequate to serve existing and projected requirements to year 2000. Water from the upper zones can be transferred to the lower zones through pressure reducing stations located within the distribution system. There are two pressure reducing stations which can transmit water from the 1570 to the 1350 zone with a normal capacity of 12 mgd and a peak (intermittent) capacity of 26 mgd.

(2) City of Loma Linda

The major distribution facilities in Loma Linda include a 12 inch primary distribution main, located in Redlands Boulevard, which serves the lowest zone of the City and the study area. The City's two wells pump into a 20 inch diameter primary transmission main located in Mountain View Avenue. The City has two inter-tie facilities; one active connection with the City of San Bernardino system at Anderson Street and Redlands Boulevard, and another emergency connection with the Redlands system at Mountain View. These inter-tie facilities significantly increase the system's reliability, and are evidence of cooperation between agencies in water supply planning.

The low zone in the City is currently served by 6.9 MG of reservoir storage facilities, located in the upper zones, with another 2.0 MG planned in the near future. Pressure reducing valves transfer water between zones.

Loma Linda has recently extended its City Limits below Mission Zanja to halfway between New Jersey and Nevada Streets, and facilities in this area will eventually be transferred to their jurisdiction.

(e) Potential Development

The basic water distribution system in the study area is currently more than adequate to serve existing development and agricultural uses. Intense planned development will require significant additional potable water supply facilities within portions of the planning area. Additional development of the groundwater and surface water resources, including the State Project water, needs to be evaluated.

The current high groundwater problem in the Bunker Hill Groundwater Basin only marginally affects the study area since groundwater levels average over 50 feet below the ground surface. The edge of the basin "pressure zone" runs basically north-south along California Street.

The most significant potential constraint to future development is existing water quality problems, including high nitrates, TCE, and DBCP. This is considered a short-term problem as the City has developed other water sources. In addition, the City may be installing well-head treatment and will be constructing new wells.

Section EV6.0205**Recommended Water Supply Facilities**(a) Planning Objective for Water Supply

The primary objective in planning water facilities for the East Valley Corridor was to develop a storage and transmission system to meet future demands in a cost effective manner. Existing facilities, when appropriate, were utilized in the plan to the fullest extent possible.

(b) Projected Demands

Projection of future water demands in the planning area were made based on the land use plan and on historical data on water use in the area. Peak flows, fire flows, and ultimate demands of total build-out were computed. Projected water demand at ultimate build-out of the planning area was estimated to average 10.66 million gallons per day. The projected need for increased storage capacity was estimated to be 22.9 million gallons.

(c) Recommended Facilities

Recommended facilities include a transmission grid to distribute water to the entire project area at a minimum of 40 psi on the maximum day for peak hourly use, and increased water storage capacity. The

recommended water supply system also provides for a pressure reducing station on Redlands Boulevard to support pressures south of Interstate 10 by transferring flow from zone 1570 to zone 1350 during peak periods.

Existing pipelines form the basis of system expansion. New pipelines are to be added in principal streets and roads where rights-of-way are in the public domain.

All storage will be located outside of the project area boundaries due to topography of the area. Storage for the 1350 zone is recommended near the present 1350 zone reservoir on Texas Avenue. Storage sites for zone 1570 and for Loma Linda pressure zone will depend on additional study of these entire pressure zones.

Recommended new water facilities include the following items: 100,320 feet of new pipe (8", 12" and 16"); 18 million gallons of increased storage capacity; and a pressure reducing station with 1800 gallon per minute capacity. For a more detailed breakdown of recommended facilities, see Engineer's Report (Appendix B.).

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CHAPTER 3. SEWAGE FACILITIES

Section EV6.0301 Existing Facilities

(a) Wastewater Collection and Treatment Agencies

Wastewater collection systems are operated by both the City of Redlands Municipal Utilities Department and the City of Loma Linda Community Services Department. Due to the limited development in the area, however, only about 10 to 15 percent of the study area is actually sewered to these collection systems. Both cities have existing master plans to extend sewer service within existing City limits and/or probable spheres of influence.

Sewage treatment agencies serving the study area currently include the City of Redlands and the City of San Bernardino. *The City of Redlands owns a sewage treatment plant which is located along the north boundary of the study area. The plant is operated by the City Municipal Utilities Department. The City of San Bernardino provides treatment and discharge of all flows collected within the City of Loma Linda and minor flows from the City of Redlands sewered areas west of Nevada Street. The San Bernardino treatment plant is located approximately two miles west of the study area. A Joint Powers Agreement between San Bernardino and Loma Linda, signed in 1965, provides the terms and conditions under which San Bernardino accepts flow from Loma Linda. No agreement exists between San Bernardino and Redlands.*

While the above agencies are the basic providers of existing sewage collection and treatment services, two other agencies, the Santa Ana Watershed Project Authority (SAWPA), and the San Bernardino Valley Municipal Water District (SBVMWD), have on-going planning responsibilities which could potentially affect the study area. Formed in 1972, - SAWPA is a regional agency composed of five member Municipal Water Districts overlying the Santa Ana River Watershed. SAWPA's primary objective is implementing projects which help meet water quality objectives for the watershed. A major project is the Santa Ana Regional Interceptor (SARI) which provides a means of intercepting and transporting high-salt water and non-reclaimable wastewater from the upper basins to the Pacific Ocean. The SARI line currently extends from the treatment and ocean disposal facilities of Orange County Sanitation Districts to Corona and Chino. The final reaches, IV-D and IV-E, are proposed to extend as far as the San Bernardino treatment plant.

The SBVMWD boundaries encompass the study area. Although the District's responsibilities are primarily in water supply and management, it is currently the lead agency for a regional wastewater management facilities plan evaluating water quality and discharge requirements for all of the area treatment plants. At issue is the need for a higher and more costly level of treatment from San Bernardino and other treatment plants in the area.

(b) Regulatory Agencies

The primary agency with regulatory authority over sewage treatment and discharge and other water quality issues is the California Regional Water Quality Control Board, Santa Ana Region. In addition to issuing and enforcing discharge permits for the sewage treatment plants, the Regional Board has planning and regulatory authority for any activities directly affecting surface or groundwater quality. These include water quality impacts from unsewered areas, industrial and toxic waste handling, and construction activities. Regional Board actions are consistent with and subject to Federal water pollution control laws and regulations as developed by the State Water Resources Control Board (SWRCB) and the State Department of Health Services (SDOHS).

(c) Wastewater Flows and Treatment Facilities

Presently, all the wastewater from the study area flows by gravity to the two treatment facilities previously mentioned. Based on existing wastewater flow patterns, the study area can be divided in two sections. Wastewater collected from the area east of Nevada Street flows via the Nevada Street trunk line to the City of Redlands wastewater treatment and disposal facility. Wastewater discharges from the area west of Nevada Street flows via the main Loma Linda outfall line at the western end of the study area, and the Mountain View and Lugonia trunk lines to be treated at City of San Bernardino wastewater facility (WWTF).

(1) City of Redlands Wastewater Treatment and Disposal Facility

The City of Redlands wastewater facility is located at the north end of Nevada Street, north of the study area along the Santa Ana River bank. The facility presently serves the majority of the City of Redlands and has a potential future service area including the unincorporated community of Mentone on the northeast, and San Timoteo Canyon on the south.

The current average wastewater flow to the plant is 5.4 million gallons per day (mgd). On a system-wide basis, the average wastewater flows to the plant are projected to increase to 9.0 mgd in the year 2005, with the ultimate potential at full annexation and build-out as high as 24 mgd. These projections assume that a proposed pumping station will be built near the intersection of Mountain View and San Bernardino Avenue. All flows from the area west of Nevada Street within the Redlands City limits and/or sphere of influence will be pumped to the Nevada Street trunk line to be treated at the Redlands Wastewater Treatment Facility. These mostly undeveloped and unsewered areas are presently served by the San Bernardino WWTF, but the City of San Bernardino has indicated that they will not continue to treat wastewater from this area in the future since no agreement exists to accept the flow.

The Redlands wastewater treatment facility was built in 1962 to handle a dry-weather flow of 2.4 mgd. In 1972, construction was started to expand the facility to its current average flow rating of 6 mgd, and to provide capacity for advanced secondary wastewater treatment for the complete flow. The plant appears to be maintained in excellent operating condition. Effluent quality meets all secondary and ammonia discharge specifications for direct discharge to percolation ponds and the Santa Ana River.

In September, 1983, the City completed a capacity analysis and detailed study for expanding the plant to 8.0 mgd [3-3]. In 1987, a plan to expand the plant to 9.0 mgd was adopted. Design work for this expansion is currently nearing completion.

(2) City of San Bernardino Wastewater Treatment Facility

The City of San Bernardino wastewater treatment facility is approximately 1/2 mile southeast of the intersection of Orange Show Road and South "E" Street in the City of San Bernardino. The facility provides treatment of combined domestic and industrial wastewater collected from the City of San Bernardino, City of Loma Linda, East Valley Water District, Highland, a small portion of the City of Redlands included in the East Valley Corridor, and the domestic wastewater from the Norton Air Force Base.

The present influent flow to the San Bernardino facility averages approximately 21 mgd of which less than two percent is contributed by industrial discharges. The plant was designed to treat an average daily flow of 28.0 mgd.

The present San Bernardino facility was constructed in 1958 with a design capacity of 13 mgd (Unit 1). The treatment facility was enlarged in 1970 with an additional 15 mgd capacity (Unit 2). The flow reaches the plant by gravity sewers coming in from the east of Waterman Avenue. Due to a number of process and/or equipment constraints, the effective capacity of the plant has been substantially less than the nominal capacity of 28 mgd. The plant is about to undergo a major upgrade/ expansion project to restore the capacity to the full 28 mgd and is expected to be completed by mid 1988. In the interim, new connections to any of the collections systems served by the plant are limited basically to property owners/developers who purchased "capacity rights" in 1984. Within Loma Linda, rights for 2,122 equivalent dwelling units were purchased by property owners or developers although it is not known how many of those are held for property within the East Valley Corridor area. An additional 900 were purchased by the City. This gives a total interim capacity right of an additional 0.85 mgd in the Plant.

Most of the existing sewer system in the City of Loma Linda collects and transports wastewater to San Bernardino WWTF via the Loma Linda outfall line. This line was constructed in accordance with the previously referenced Joint Powers Agreement which provided Loma Linda with the right to convey wastewater to San Bernardino WWTF via the outfall line. One exception to the above flow pattern is a portion of the study area, within Loma Linda's boundaries, east of Mountain View and South of I-10, which is served by the City of Redlands Mountain View trunk line conveying wastewater to the San Bernardino plant. Current estimated average and peak flows from Loma Linda are estimated to be 1.5-2 mgd and 3-3.5 mgd, respectively.

Should the proposed Redlands pumping station be built to pump flows from Mountain View line to Nevada Street trunk line, Loma Linda would have to divert its flow to the San Bernardino plant, either via the outfall line or a diversion structure on the Mountain View trunk; or develop an agreement with Redlands for treatment at the Redlands plant.

(3) Santa Ana Regional Interceptor

The SARI line, if extended to the San Bernardino area, would provide a means of conveying wastewater out of the study area for treatment at Orange County Sanitation District's facilities and discharge to the ocean. The fundamental purpose of this line is to transport high salt water and wastewater out of the Santa Ana river and groundwater basins. Certain industrial and brine flows would be potential uses of the pipeline. A portion of its capacity in the line could also be designated for general sewage discharged on an interim basis. A financing study for the uncompleted reaches of the SARI line is currently being completed.

(d) Collection Facilities

Both Loma Linda and Redlands have existing sewers within the study area. Sewer service is provided to most of the Loma Linda portion of the study area, but to very limited sections of the Redlands Portion.

A sewer master plan, developed to provide a basic plan of overall wastewater collection systems for the City of Loma Linda, was completed in November, 1982. A wastewater collection system master plan report was completed for the City of Redlands in 1985. This report identifies collection system improvements that will be required in the next twenty year planning period and sets forth an ultimate projection.

Since the East Valley Corridor Land Use Plan developed by the County for the study area differs markedly from the land use plan presented in the Redlands Master Plan, it can be expected that sewerage improvement recommended in the present report will differ from those of the earlier plan.

(e) Capacities and Constraints

Adequate collection system capacities currently exist to serve the limited areas of sewered development within the study area. In addition, existing master plans account for some level of development within the area and a basic collection network has been established. The most critical collection system need, which must be addressed as soon as possible for development west of Nevada Street and north of I-10, is the proposed Redlands pumping station. New trunk lines will also be required for any development that occurs north of Lugonia Avenue, and the area south of Redlands Boulevard and east of California Street.

There is short-term capacity in the two existing treatment plants which serve the area, although new connections to the San Bernardino plant are limited for the next few years until completion of the plant upgrade project.

Therefore, limited growth in the study area can apparently be accommodated under existing conditions. For the long-term (e.g. beyond 5 to 10 years), substantial additional capacity will be required to accommodate the anticipated growth in the service areas of both plants, including the growth in the East Valley Corridor. This is particularly true for the portion of the study area served by the Redlands treatment plant.

Section EV6.0305 Recommended Sewage Facilities

(a) Planning Objective for Sewage Facilities

The primary objective in planning sewage facilities for the East Valley Corridor is to develop sewage collection facilities and treatment plant capacity to serve ultimate development of the area in a cost effective manner. Existing facilities were used as the starting point to develop, over time, a complete collection and transport system.

(b) Projected Demands

Future sewage flows in the area were determined based on the land use plan and on historical data on average unit flow factors in adjacent communities. Peak wet and dry weather flows were computed for the purpose of sizing collection systems, gravity sewers, and pumping stations in the study area. Ultimate sewage flows at total build-out of the planning area were estimated to average 8.79 million gallons per day.

(c) Recommended Facilities

The proposed collection system layout conveys all sewage flow to final collection points in each of the three sewage zones (Loma Linda, Redlands West, and Redlands East). It is based on existing trunk sewers and drainage paths, and on both existing and proposed road alignments. The design maximizes the number of units served by gravity to minimize collection system costs. All pipes in the collection system were sized for peak flow rates for their respective tributary area, which were computed by applying peaking factors to the average flow rates.

The Redlands East Zone collection system can convey flows by gravity directly to the Redlands treatment plant. Pipelines transporting City of Redlands flows to the treatment plant pass through the East Zone and form an existing grid of major sewer trunk lines in the area. To these existing trunk lines is added the flow generated within the East Valley Corridor along and east of Nevada Street. Some existing lines, however, cannot carry both projected flows for the entire City and projected ultimate flows generated in the East Zone. New and, in some cases, parallel pipelines are therefore recommended to provide adequate capacity for future flows.

The collection system in the Redlands West Zone conveys flows generated west of Nevada Street to a single collection point near the intersection of San Bernardino Avenue and Mountain View Street. It is recommended that a pumping station be located at a site near this intersection and that collected flows be pumped via a force main up to the Nevada Street trunk line in which it can flow by gravity to the Redlands treatment Plant. The pumping station and force main are part of the recommended major facilities for the East Zone collection and transport system.

The ultimate pumping station capacity is sized for a peak wet weather flow at ultimate development of 7.8 mgd, to be installed in phases. The ultimate force main would consist of two parallel 14-inch pipelines, also to be installed in phases. Installation of the pumping system would eliminate the current practice of transferring West Zone sewage to the City of San Bernardino's collection system.

Loma Linda sewage flows originating in the East Valley Corridor are collected and conveyed by gravity along the Redlands Avenue trunk sewer to the San Bernardino Treatment Plant via the Loma Linda Outfall. Loma Linda sewage, which currently flows down Mountain View Avenue and enters the City of San Bernardino collection system at San Bernardino Avenue, would be diverted by a connection between manholes at Mountain View and the I-10 Freeway and directed to the Loma Linda Outfall. This will eliminate the current practice of mixing flows of the two cities before treatment.

Recommended new sewage facilities include the following: 44,390 feet of gravity sewer pipelines (varying sizes); a sewage pumping station with capacity of 7.8 million gallons per day; and 18,480 feet of force main. For a more detailed breakdown on sewage facilities, see the Engineer's Report (Appendix B.).

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CHAPTER 4. STORMWATER DRAINAGE

Section EV6.0401 Existing Facilities

(a) Responsible Drainage Agencies

The following agencies have various degrees of responsibility for stormwater drainage facilities in the East Valley Corridor area.

(1) U.S. Army Corps of Engineers

The Corps plans, designs, constructs, and operates major regional flood protection facilities such as the Santa Ana River, San Timoteo Creek, and Mission Zanja Creek. The operation and maintenance of these facilities is often turned over to a local flood control agency, such as the San Bernardino County Flood Control District. The Corps is presently conducting a study to update the hydrological data and the extent of the flood plain boundary of San Timoteo Creek during a standard project flood and a 100-year flood. The Corps is also in the process of improving the Mission Zanja channel in downtown Redlands, east of the Specific Plan area.

(2) San Bernardino County Flood Control District

SBCFCD is responsible for the planning, design, construction, operation, and maintenance of major county flood control facilities. When a flood control district right-of-way is obtained, either as the result of development plans or in a problem area, the District maintains the facilities. SBCFCD also checks design drawings on major development projects with potential drainage problems.

(3) San Bernardino County Surveyor - Land Development Section

The Surveyor's Office is responsible for the detailed checking of development plans within County areas. All developments must submit drainage computations using standard County procedures and basic design data. In areas where "leap frog" development is occurring and where improved drainage facilities are not available to discharge development drainage, the Surveyor's office is concerned mainly with the safe routing of upstream stormwater flows through the proposed development and the safe discharge of flows downstream of the development.

(4) California Department of Transportation (Caltrans)

Caltrans plans, designs, constructs, operates and maintains flood control facilities required to drain State rights-of-way and/or adjacent tributary areas. Within the East Valley Corridor, Caltrans maintains two drainage channels. One channel runs along the south side of Highway 10 between Alabama Street and San Timoteo Creek. The other channel runs along the east side of Highway 30 between the Highway 10 Interchange and the Santa Ana River

(5) City of Redlands

The Public Works Department of the City of Redlands is responsible for the planning, design, construction, and maintenance of any flood control facilities required for local drainage within the City limits. Major drainage facilities should be consistent with the CSDP.

(6) City of Loma Linda

The City Engineer for the City of Loma Linda is responsible for the planning, design, and construction, and the Community Services Department handles maintenance of any flood control facilities required for local drainage within the City limits.

(b) Drainage Pattern and Hydrology

The East Valley Corridor lies within the overflow flood plain of the Mission Zanja and San Timoteo Creek. Both are tributaries of the Santa Ana River, which forms the northern boundary of the Corridor. The Santa Ana River is a major partially improved water course with 360 square miles of mountainous watershed tributary to the study area.

San Timoteo Creek is a partially improved channel with 126 square miles of hilly watershed lying in the counties of San Bernardino and Riverside. The Creek flows generally in a northwest direction and discharges into the Santa Ana River north of Highway 10 and west of Waterman Avenue. In 1973 the Army Corps of Engineers estimated peak discharge of 45,000 cfs for the standard project flood and 23,000 cfs for a 100-year flood. The southwest portion of the study area is affected by flooding in San Timoteo Creek.

The Mission Zanja originates in the Crafton Hills, east of Redlands, and flows westerly through the City of Redlands into the Santa Ana River near Loma Linda. Mission Zanja is an open channel except when it runs parallel and under Redlands Boulevard from 9th Street to Eureka Street, in downtown Redlands, as an underground box culvert. This tributary has a drainage basin which encompasses about 25 square miles. Morey Arroyo, a local tributary of the Mission Zanja, is an unimproved channel draining the southern portion of the study area in Redlands.

In a 1981 Mission Zanja project report by the U.S. Army Corps of Engineers, peak drainage of Mission Zanja downstream from Morey Arroyo was estimated to be 12,400 cfs for the standard project flood and 5,700 cfs for the 100-year flood. for future conditions.

Under current conditions neither Morey Arroyo nor Mission Zanja have sufficient carrying capacity to handle 100-year floods. Major portions of the study area south of Interstate 10 are within the overflow flood plain of Mission Zanja and Morey Arroyo, and have experienced severe flooding in the past.

Portions of Loma Linda and Bryn Mawr lying in the southwest corner of the study area would be flooded by overflow from San Timoteo Creek. The area would receive a minor amount of overflow from Mission Zanja, but the chance for both streams to peak and overflow at the same time are remote. Areas north of Interstate 10 are not a part of any major flood plain.

(c) Existing Flood Control Facilities

(1) Highway 30 (Tennessee Freeway) Storm Drain

This storm drain is an open channel running along the east side of Highway 30, within the Caltrans right-of-way. The channel was constructed with the roadway in 1984, and is mostly concrete lined starting at the I-10 Interchange flowing north to discharge into the Santa Ana River. The channel bottom width varies from 6 to 8 feet, the side slope varies from 1.5:1 to vertical, and the height varies from 3.8 to 6.8 feet.

(2) I-10 Storm Drain

The I-10 storm drain is a concrete lined open channel storm drain which runs along the south side of Interstate 10 within the Caltrans right-of-way. Starting at Alabama Street, it flows west to discharge into the Mission Zanja at the bridge and overhead crossing. Starting again west of the crossing, it flows west to discharge into San Timoteo Creek.

(3) Project 4-16

This project was constructed in 1985 and consists of 33, 57, 60, and 69 inch RCP runs along and within the Mountain View Avenue right-of-way, in the City of Loma Linda. It starts at the Mission Road intersection and flows north to discharge into Mission Zanja Creek north of I-10.

(4) Project 4-17

A storm drain consisting of 48 and 54 inch RCP has been constructed along Lugonia Avenue, between Alabama Street and California Street. This recently completed line is a portion of Project 4-17 and eventually would be extended west along Lugonia Avenue to discharge into the Mission Zanja Creek, as the area develops. It will be a dry line until the downstream portion is completed.

(5) Project 4-19

A storm drain consisting of 48 and 41 inch RCP runs along and within Alabama Street right-of-way, in the City of Redlands. Starting north of Redlands Boulevard, it flows south to discharge into Mission Zanja Creek.

(6) Project 4-42

A 42 inch RCP storm drain starts at the intersection of Redlands Boulevard and Ohio Street in Loma Linda. It flows westward along Redlands Boulevard to Anderson Street and turns north along Anderson to discharge into a Caltrans drainage channel along the I-10 Freeway.

(d) Capacities and Constraints

Comprehensive storm drain planning has been conducted in the vicinity of the study area and several major pipeline or open channel facilities have been constructed, generally consistent with the plan. Therefore, most of the developed portions and some of the undeveloped portions already drain to facilities capable of carrying up to a 25-year runoff event from the local sub-basins.

Several constraints must be addressed to allow full development of the area. These include the following:

- (1) A significant portion of the portion of the planning area within the City of Loma Linda is contained in the flood plain of San Timoteo Creek. Portions of the planning area south of Lugonia, adjacent to the Mission Zanja and Morey Arroyo, is contained in the flood plain of the Mission Zanja flood channel. These two major drainage ways are regional channels which have been studied by the Corps of Engineers. Improvements to control flooding would require long-term regional facilities. A short-term solution to the problem is locating all building pads above the maximum flood elevation.
- (2) The hydrology for the study area (particularly north of the I-10 freeway) was based on low intensity land uses and stormwater flows are expected to increase significantly with high intensity development.
- (3) The Mission Zanja bridge at the intersection of Redlands Boulevard and California Street is a very inadequate structure with respect to alignment and creates a dangerous traffic pattern.

Section EV6.0405 Recommended Storm Drain Facilities

(a) Planning Objective for Storm Drain Facilities

The major objective in planning for stormwater drainage facilities within the East Valley Corridor was to provide a backbone system of pipelines and channels to convey stormwater runoff to the Santa Ana River in the north and to the Mission Zanja in the south. The plan includes major collection pipelines and those pipelines which form major axes of flow, as well as necessary improvements to the Morey Arroyo and Mission Zanja channels. No pumping stations or holding basins are recommended for the East Valley Corridor area.

(b) Projected Stormwater Flows

Stormwater flows generated from rainfall within the study area were determined according to the method and procedures outlined in the County of San Bernardino Hydrology Manual, 1986. The design storm for calculating flows was taken as the 10-year storm with a 24-hour duration pattern.

Since the drainage basins of San Timoteo Creek, the Mission Zanja and Morey Arroyo channels extend for beyond the boundaries of the East Valley Corridor, complete drainage studies for these channels were beyond the limits of this study. Design flow rates for the Mission Zanja and Morey Arroyo were taken from other studies which considered the entire basin areas of these channels. The design storm for projecting flow rates was taken as the 100-year storm, in conformance with the design standards set for the reaches beyond the East Valley Corridor boundaries.

It was recommended that an improved channel section for Morey Arroyo be constructed following a new alignment west of Alabama Street to a confluence with the Mission Zanja near Iowa Street. The peak design flow rate corresponding to the 100-year flood level was estimated to be 3,022 cfs for Morey Arroyo.

Peak flow rates for the Mission Zanja within the East Valley Corridor were provided by the San Bernardino County Department of Transportation and Flood Control, based on ongoing flood routing analyses of the channel. Figures assumed for the present study are based on the construction of a detention basin at Wabash Street to hold back peak flows, and on the recommended realignment of the Morey Arroyo described above. With these basic assumptions, the peak design flow rates for the Mission Zanja above the confluence of Morey Arroyo is taken at 6,390 cfs, and below the confluence of Morey Arroyo at 7,200 cfs.

(c) Recommended Drainage Facilities

The recommended backbone stormwater facilities consist of stormwater pipelines and improvements to the Mission Zanja and Morey Arroyo channels. Stormwater pipelines convey local runoff to either the Santa Ana River, Mission Zanja, or Morey Arroyo. These channels in turn transport stormwater flows beyond the East Valley Corridor boundaries. The recommended facilities integrate with existing facilities described above to form a comprehensive drainage plan for the East Valley Corridor.

Flow rates and sizes are of greater magnitude than those projected in the Comprehensive Storm Drain Plan No. 4. These larger flow rates and larger pipe sizes are due to the newer design criteria of the 1986 edition of the County Hydrology Manual and the more intensive development of the area called for by the East Valley Corridor study land use plan.

Stormwater flows generated north of Lugonia Avenue are collected in local pipelines and conveyed in north/south collectors northward to the Santa Ana River. Runoff on either side of Lugonia Avenue will be collected in one long storm drain installed along Lugonia that will convey flow westward and discharge it in the Mission Zanja just east of Mountain View. The reach between Alabama and California is existing; new pipelines between California and Mountain View will complete this storm drain.

South of the I-10 freeway a major collector is recommended for Redlands Boulevard. Beginning just west of Alabama, this pipeline will run westward along Redlands Boulevard and discharge into the Mission Zanja near California Street. A total of 40,020 feet of storm drain pipelines are required within the planning area; for a detailed breakdown of recommended sizes and locations, see the Engineer's Report (Appendix B.).

The existing Morey Arroyo is inadequate to carry the predicted 100-year storm flows and must be improved in order to carry these flows. The recommended improvements are summarized as follows:

- (1) Improvements to the existing channel from west of Tennessee Street and continuing westward along the existing channel to Alabama Street.
- (2) Addition of a reinforced concrete box culvert at Orange Street.
- (3) Construction of a reinforced concrete double box culvert at Kansas Street.
- (4) Realignment of the channel west of Alabama Street, to flow northwesterly and discharge into Mission Zanja in the vicinity of Iowa Street.
- (5) Construction of a double box culvert under Citrus Avenue.
- (6) Construction of a new confluence with Mission Zanja and any required erosion protection at the confluence.

Improvements in the existing channel and the new channel section would include a rectangular reinforced concrete cross section with bottom controls if necessary. Channel capacity would be provided for the full 100-year design flow of 3,022 cfs.

The existing capacity of the Mission Zanja channel is also inadequate to contain the projected 100-year stormwater runoff. Recommended improvements include the following:

- (1) Construct a grouted, rip-rap trapezoidal channel along the existing channel alignment.
- (2) Construct a reinforced concrete channel crossing under the I-10 freeway.
- (3) Provide additional width to the existing bridges at the Bryn Mawr and Park Avenue crossings.
- (4) Construct additional box culvert capacity at the existing box culvert crossings at New Jersey, Nevada, and Iowa Avenue.

Crossing structures at Mountain View, Alabama, and Kansas are adequate to carry the 100-year projected runoffs.

(d) Other Flood Control Provisions

Because of the extensive watershed of San Timoteo Creek, covering over 120 square miles outside of the Plan area, the East Valley Corridor Specific Plan does not propose channel improvements to the Creek at this time. Protection from overflow from San Timoteo Creek will be implemented through adoption of the Safety/Floodplain Overlay District on the Specific Plan Overlay Map, with development standards and locational criteria as contained in Division 5 of this text. This District was established according to maps and guidelines issued by the Federal Emergency Management Agency, which updated the City of Loma Linda portion in 1987.

CHAPTER 5. COMMUNITY FACILITIES

Section EV6.0501 Existing Facilities

(a) Fire Protection

Fire protection is provided to the study area by three separate agencies: the Cities of Loma Linda and Redlands, and San Bernardino County. The Cities provide fire protection within their existing boundaries, and the County serves the unincorporated areas.

The City of Redlands Fire Department currently maintains three stations. The closest one to the Specific Plan area is the recently constructed station at Orange and Pennsylvania. The central station in downtown Redlands is located about 1-1/2 miles east of the study area. Long range plans call for construction of three additional stations and phasing out of the central station. The two proposed stations most pertinent to the study area include one near Brookside and San Mateo, near the southeast corner of the planning area, and one within the planning area at the southwest corner of Lugonia and Nevada.

The City of Loma Linda Public Safety Department has one station at the corner of Barton Road and Loma Linda Drive, just south of the planning area. The only additional expansion under consideration is a second station in the hills at the south end of the City.

The County of San Bernardino Fire Warden Department maintains three stations which could potentially respond to calls in the project area. The closest is a single engine station at Barton Road and Anderson Street in Loma Linda, two miles southwest of the area. Other stations are in Mentone, four miles to the east, and in Highland about two miles to the north. Due to the gradually decreasing unincorporated area, the covered area for response is being reduced and thus there are no plans for expansion in the area.

In general, the existing level of protection offered to the project area is more than adequate with response times generally less than five minutes. Furthermore, a Joint Response Agreement exists between the two cities and other neighboring cities, as well as Mutual Agreements with CDF to more effectively extend the existing coverage. Ultimately, however, an additional station in the northwest portion of the project area will be necessary.

(b) Law Enforcement

Law enforcement is provided by the City of Redlands for areas within the City limits and by the San Bernardino County Sheriff's Department in the unincorporated areas and under contract to the City of Loma Linda. The Redlands Police Department operates from one headquarters building in downtown Redlands. No additional facilities would be required to serve the project area, although additional staffing and equipment would eventually be required. Patrol, traffic and detective operations are provided within the study area by the Sheriff's Department operating out of the main headquarters station in central San Bernardino about two miles north of the study area. In addition, there is an office in the Loma Linda Public Safety building on Barton Road for use by Sheriff's Department personnel while on duty within Loma Linda. No additional facility requirements appear necessary at this time.

(c) Schools

The East Valley Corridor is within the Redlands Unified School District. Three elementary, one junior high, and one senior high school currently service the students living within the site area.

Mission Elementary School is located at California Street and Redlands Boulevard. There are presently four portable classrooms and four trailers in use on the campus. These facilities are operating at capacity and there is no room for further expansion on the site.

Victoria Elementary School is located at 9963 Richardson Street, about one-half mile north of I-10 and west of Mountain View Boulevard. The District has placed four relocatable classrooms and five trailers at this facility, which is now operating at capacity. There is no room for further expansion of this school.

Lugonia Elementary School, at 202 East Pennsylvania Avenue, is located on the north side of Redlands approximately one and one-half miles east of the study area. The school has two relocatable classrooms, with space on campus to accommodate two more for future expansion.

The planning area is served by Clement Junior High School, which is located across the street from Lugonia School. There are three portable classrooms at this facility, and the campus has room for future expansion.

Redlands Senior High School, at 840 East Citrus Avenue in central Redlands, has one trailer and six portable classrooms. A second high school proposed for the east side of Redlands (near Mentone) is in the planning stage, but will not serve the study area. Long range planning by the District includes a possible third high school, to be located in northwest Redlands, which would serve the Specific Plan area. However, the need for this facility would be assessed based on development trends in the area over the next 10 to 15 years.

The District owns a 60-acre site south of Redlands Boulevard between Mountain View and California, but has no plans to develop a school there. Instead they are hoping to sell or lease this property to generate income for school facilities elsewhere. The District is not presently planning any school facilities within the planning area.

Section EV6.0505 Planned Facilities

While development within the Corridor will result in additional staffing and equipment needs for fire protection, law enforcement and schools, the only facility currently planned within the study area is the new fire station to be located at Lugonia and Nevada. The City is in the process of purchasing the property for this station. Construction and financing of the facility, which is estimated to cost about one million dollars, will be coordinated with infrastructure and financing plans for CSA-110.

However, updated information indicates that the Redlands Unified School District is actively seeking school sites within the East Valley Corridor Specific Plan area.

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CHAPTER 6. INFRASTRUCTURE PLAN

Section EV6.0601 Introduction

An integral part of the East Valley Corridor Specific Plan is the assessment of infrastructure needs to support proposed development, and the coordination of infrastructure improvements with development implementation. Given the magnitude of the planning area and the multiplicity of property owners, it is anticipated that development within the area and build-out of plan uses will occur over a number of years. The anticipated 40-year build-out period for the Specific Plan area will require that infrastructure construction is coordinated with development in order to provide adequate lead time for financing and infrastructure design.

The infrastructure plan outlined in this Chapter is meant to function as a guide to staff and decision-makers in developing long-term and annual capital improvement plans and financial decisions. It is recognized that future economic conditions are not totally predictable and that adjustments and revisions will be an inherent part of the development and financing process. Since these adjustments and revisions may need to occur frequently in order to respond adequately, such changes should not be interpreted as requiring a Specific Plan Amendment.

Section EV6.0605 Infrastructure Planning Areas

New development within the East Valley Corridor is expected to occur first in areas where existing infrastructure can support new development, and later in other areas as additional infrastructure is completed. Areas of the Corridor where adequate infrastructure exists to support near-term development include land adjacent to Interstate 10 and Redlands Boulevard; adjacent to the eastern portion of Barton Road; and adjacent to State Route 30 south of San Bernardino Avenue. These areas were grouped together as Areas I, IA and IB, based upon estimates of relative time of development. Area I includes areas which are already substantially developed and where infill development could occur without major improvements. Area IA includes areas which are not yet developed but where plans for development are underway. Area IB includes areas which may be developed without substantial improvements, but which may be slower to develop based upon marketing considerations, such as the Regional Commercial district.

Within the remaining areas of the Plan, development will be constrained by inadequate access, drainage facilities, and water and sewer lines. Additionally, portions of the area north of I-10 are within an Agricultural Preserve and contain parcels which are under Williamson Act contracts. Area II was determined to contain land which, though requiring substantial infrastructure improvements, was determined to have fairly good potential for development in the near future. Area II includes the central portion of the planning area south of I-10, which will require improvements to the Mission Zanja prior

to development; the northwest portion of the planning area, which will require substantial road improvements; and areas adjacent to San Bernardino Avenue, which will require disestablishment of a portion of the Agricultural Preserve, but which are in a logical location for extensions of sewer, water and stormwater drainage lines.

Area III was also considered to have good development potential, but is probably not likely to develop prior to Areas I and II due to the nature of the infrastructure systems required for development. An area adjacent to California and Barton Road, within Loma Linda's sphere of influence, was included in Area III based upon information from the City indicating that this area will not be sewered in the near future. Sewer and water facilities within the northern portion of the study area will be extended from south to north. Similarly, the improvements to California Street and Palmetto Avenue, the major arterial into the northern area, will occur from south to north. While these improvements could be installed initially to open up the entire area for development, it was felt that the cost of such an effort would make this alternative unlikely. Therefore, the north and northeast portions of the planning area were also included in Area III. Figure EV6-1 shows the proposed phasing plan as discussed in this section.

Section EV6.0610 Infrastructure Improvement Plan

(a) Introduction

This Section contains a review of the proposed construction of infrastructure improvements needed to support development within the Corridor, including circulation, water, sewer, drainage and community facilities. The phasing of certain infrastructure improvements is sometimes determined by the nature of the system itself, such as drainage and sewer systems which generally require that downstream trunk facilities be constructed prior to the construction of upstream lateral lines. Other infrastructure facilities, such as street and water improvements, can often be phased in conjunction with the timing or phasing of development.

This analysis attempts to identify the major infrastructure improvements required to support development within Areas I, II, and III. In addition to identifying facilities needed, costs of required improvements have been estimated.

It should be noted that the proposed infrastructure plan facilities is intended only as a general guideline, and is based on the assumption that development will occur as described in the previous section. If development projects or patterns differ from the assumed sequence, then infrastructure improvements should be phased in a way that will support the actual development condition. Also, the priority of importance given to

certain infrastructure improvements may not always conform to the order of projected phasing of new development. Some facilities associated with later phases of development could have a higher construction priority because they may be important in providing support to development of large land areas. An example of this would be construction of California Street and Palmetto Avenue through the northern portion of the planning area, which would facilitate near-term development to occur on various sites in Areas II and III, even though Area I is considered to have more potential for early development.

It should also be noted that some infrastructure facilities shown for construction in Area I are also needed to support later phases of development. While the initial cost of constructing these facilities is incurred in one area, other areas which may develop at a later date also benefit from this work. Therefore, costs for various improvements will be allocated to each area based on the benefit gained by each area from the improvements, in the financing plan for the project.

(b) Circulation

As indicated in Section EV6.0101, most of the major and secondary highways within the East Valley Corridor are not currently improved to ultimate design standards, and will eventually require extensive improvements to meet these standards. In addition, other major circulation system improvements needed for plan build-out will include an all-weather crossing over the Santa Ana river wash at Alabama; construction of a bridge over the Mission Zanja at California and Redlands Boulevard along with improvement and realignment of the intersection; construction of a bridge over Route 30 at Palmetto; and signal systems.

The construction of roadway improvements may be approached in various ways. One approach would be to construct all major and secondary highways to ultimate design standards in a series of construction phases corresponding with the assumed phasing of development. Following this approach, Redlands Boulevard, Lugonia, and portions of Palmetto Parkway and Alabama, along with the Zanja bridge and freeway interchange improvements, would be constructed during development of Area I. Another approach would be to construct interim roadway improvements in a series of construction phases in which partial improvements for a reduced number of lanes are constructed initially while traffic volumes are low, and the final widened roadways with the full number of lanes and median and parkway improvements are constructed at a later date as development occurs and traffic volumes warrant the full improvements. A third approach would be to construct roadway

improvements in a piece-meal fashion as development occurs on a site-by-site basis.

The approach that is followed could depend somewhat on the methods of financing that are used for construction of public improvements. It is generally recommended, however, that an approach involving the acquisition of right-of-way and construction of interim improvements in a phased program be followed, with ultimate improvements constructed when traffic volumes require the full improvements. This approach would provide improved circulation and access conditions for new development at a minimum initial cost. It will also provide for greater flexibility in the timing of construction of other infrastructure improvements such as drainage and utility facilities.

This approach is made more workable in the East Valley Corridor by the computerized traffic model which was generated for the planning area. The model can be used to monitor trips as the plan area develops, and to predict levels of service throughout plan implementation for the purpose of identifying needed improvements.

Table EV6.1, contains a summary of preliminary estimated costs for ultimate roadway improvements associated with the three Infrastructure Planning Areas of development described above. The estimated costs are for full roadway improvements including grading, paving, curbs, sidewalks, medians, traffic signals and other miscellaneous items based on 1987 unit prices. Right-of-way costs are also shown at estimated 1987 costs. That the costs shown on the following tables indicate the area in which the improvements are located, rather than the area of benefit. Ultimate costs borne by each phase are based on benefit derived from the improvement, as determined in the financing study described in Chapter 7.

TABLE 6.1

SUMMARY OF RECOMMENDED ROAD FACILITIES AND COSTS BY AREA

	Road Improvement (feet)	No of Proposed Signals	Acres of Right-of- Way	Bridges	Total Cost
Area I	67,320 \$24,545,700	18 \$1,980,000	18.49 \$1,386,501	Calif/Redlands \$2,000,000	\$29,912,201
Area IA	13,270 \$5,094,700	5 \$550,000	11.53 \$864,876	-----	\$6,509,576
Area IB	4,990 \$1,909,450	1 \$110,000	3.60 \$270,076	-----	\$2,289,526
Area II	40,050 \$13,852,650	12 \$1,320,000	28.27 \$2,120,248	-----	\$17,292,898
Area III	30,520 \$9,410,400	6 \$660,000	24.36 \$1,827,135	Palmetto/SR-30 \$2,500,000	\$14,397,535
Totals	156,150 \$54,812,900	42 \$4,620,000	86.25 \$6,468,836	\$4,500,000	\$70,401,736

(c) Water Supply

As stated in Section EV6.0205, water facilities needed for ultimate development include increased water storage capacity, water pipelines, and a pressure reducing station. The water facilities plan calls for water storage to be increased during each phase of development. Water system improvements can be accomplished generally in conformance with the phasing of development. The pressure reducing station will be needed for development of Area III.

The following table summarizes facilities needed and estimated costs for water supply facilities in the Infrastructure Planning Areas described in Section EV6.0805.

TABLE 6.2

**SUMMARY OF RECOMMENDED WATER SUPPLY FACILITIES AND COSTS, BY
AREA**

	Pipelines (feet)	Storage Capacity (mg)	PR Station (gpm)	Total Cost
Area I	17,000 \$935,000	3.6 \$1,512,000		\$2,447,000
Area IA	8,920 \$490,600	1.3 \$546,000		\$1,036,600
Area IB	5,280 \$330,000	.9 \$378,000		\$708,000
Area II	41,740 \$2,176,900	7.3 \$3,066,000		\$5,242,900
Area III	27,380 \$1,387,100	4.9 \$2,058,000	1,800 \$80,000	\$3,525,100
Totals	100,320 \$5,319,600	18 \$7,560,000	1,800 \$80,000	\$12,959,600

(d) Sewage Facilities

Sewage collection facilities needed for ultimate development of the planning area include gravity sewer pipelines, force mains, and a sewage pumping station. The pumping station is recommended to be constructed in phases, with capacity added as each of the three areas develops. The force mains are required for development of Areas I and II. Pipelines can be installed along with the phasing of development in each area.

The following table summarizes facilities and estimated costs by area for sewage facilities.

TABLE 6.3

SUMMARY OF RECOMMENDED SEWERAGE FACILITIES AND COSTS, BY AREA

	Gravity Sewer Pipelines (feet)	Force Main (feet)	Pumping Station (mgd)	Total Cost
Area I	23,060 \$3,733,400	7,920 \$554,400	3.0 \$720,000	\$5,007,800
Area IA	5,490 \$888,750			\$888,750
Area IB	-----	-----	-----	\$-0-
Area II	6,600 \$745,800	10,560 \$739,200	3.0 \$360,000	\$1,845,000
Area III	9,240 \$1,023,000	-----	1.79 \$360,000	\$1,383,000
Totals	44,390 \$6,390,950	18,480 \$739,200	7.79 \$1,440,000	\$9,124,550

(e) Storm Drain Facilities

Drainage facilities needed for plan build-out include improvements to the Mission Zanja and Morey Arroyo channels, as well as storm drain pipelines to be installed throughout the area. Channel improvements will be required for full development of the southern portion of Area II; pipeline installation can be phased with road and utility improvements as each area develops. Drainage facilities will constitute a significant portion of the total infrastructure costs for the area, with a total estimated cost of over \$28 million.

The following table summarizes facilities and estimated costs by area for drainage facilities.

TABLE 6.4

SUMMARY OF RECOMMENDED DRAINAGE FACILITIES AND COSTS, BY AREA

	Pipelines (feet)	Channel Improvements	Total Cost
Area I	10,520 \$3,536,400	\$13,500,000	\$17,036,400
Area IA	5,940 \$2,395,800	-----	\$2,395,800
Area IB	-----	-----	\$-0-
Area II	20,920 \$8,191,400		\$8,191,400
Area III	2,640 \$844,800		\$844,800
Totals	40,020 \$14,968,400	\$13,500,000	\$28,468,400

Conclusion

This Division of the Specific Plan has provided a summary of existing infrastructure facilities in the planning area, as well as facilities needed to accommodate future development in the area. A facilities engineering plan and financing plan prepared in conjunction with the Specific Plan provide more detailed information on projected facilities needs and financing methodology, and are included as Appendices to this document under separate cover. These reports address provisions of road, sewer water, drainage and community facilities.

In order to provide all needed infrastructure, construction facilities must be coordinated with development of the planning area. An estimate of how the planning area might build out was undertaken to break down the total infrastructure cost into subareas, designated as Infrastructure Planning Areas. These areas should be considered as preliminary in terms of phasing of infrastructure and development; a more refined phasing plan will be formulated by the Agency responsible for infrastructure coordination upon the completion of more detailed cost-benefit analysis of the area.

APPENDIX A

SAMPLE INFRASTRUCTURE AND PUBLIC SERVICES FISCAL IMPACTS CHECKLIST

PROJECT DESCRIPTION:

PROJECT LOCATION:

1. Water Service

- a. Location of nearest available water main and distance from project.

- b. Estimated water consumption.

2. Sewer

- a. Location of nearest lateral or trunk and distance from project.

- b. Estimated volume of wastewater generated.

3. Drainage

- a. Location of nearest downstream drainage facility and distance from project.

4. Roads

- a. Distance from nearest existing road classified as a collector road or larger

- b. Average daily trips anticipated from the project.

- c. Peak hours of traffic generated from the project.

5. Police

- a. Location of nearest police station

- b. Will private security guards or other security measures be included with the project? _____ If yes please explain.

6. Fire Protection

- a. Location of the nearest fire station and its shortest paved distance from the project after the project is completed.

7. Type of construction utilized.

- i. Wood frame _____
- ii. Non-combustible _____
- iii. Fire resistible _____
- iv. Other _____
- (Please specify) _____

8. Libraries

- a. Location of nearest library and distance from project.

9. Parks

- a. Location of nearest public park and distance from the project.

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